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Trade and Industry

1 September 1978

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Chairmen and Managing Directors

The following executives are seeking to further their careers within fields where proven experience counts and is rewarded accordingly

FINANCE

1. **Cost Supervisor.** BSc (Hons) Economics and statistics. An impressively bright young member of a substantial cost analyst team seeking further career development. **Age 23 Salary circa £8,000**

2 **Audit Senior.** ACA good French. After eight years professional international experience – including computer auditing – he now wishes to move into commerce or industry further to progress his career. **Age 27 Salary £7,500**

3 **Corporate Planner** BSc. Hons. MA business analysis. Thoroughly practical with a wide range of computer user and consultancy experience in management services, including overseas. Seeking further career development. **Age 28 Salary £6,500+**

4 **Treasurer.** AIB. Fluent French good German. An intelligent young executive with merchant banking, accountancy and treasury experience covering a wide range of international industrial and financial services in textiles, oil and banking. Seeking career development. **Age 28 Salary £7,500+**

5. **Finance Manager.** ACMA. BSc (Elect Eng). Fluent German. A most impressive senior executive with substantial technical and manufacturing experience (including general management) in Europe. Having recruited his German successor he now wishes to develop his own career in the engineering or computing industries. **Age 31 Salary £10,000+**

6. **Financial Controller.** FCA. Controlling the £65 million turnover of the subsidiary of a major international manufacturing group consisting of numerous small companies. Promotion blockage, seeking career development with greater scope. **Age 36 Salary £11,000+**

7. **Finance Manager.** BSc (Econ) ACA. MBA (INSEAD) distinction. Fluent French and German. A highly intelligent large group executive with international professional and manufacturing experience. Location very flexible. **Age 33 Salary £10,000+**

8. **Merchant Banker.** BA(Cantab) Law MBA (IMEDE). Good French with substantial legal and banking experience in Australia and Europe. Seeking a move into industry which could lead towards general management. Location flexible. **Age 35 Salary circa £12,000**

9. **European Controller.** BBA. CPA. An experienced international especially in large scale retail and shipping operations. Wishes to remain London based. **Age 35 Salary circa £18,000**

10. **Financial Manager/Secretary.** C.A. (Portugal) BAM. Fluent French, Spanish, Italian, Portuguese, English. An experienced corporate financial manager and consultant. Location flexible. **Age 40 Salary £10,000+**

11. **Finance Director.** FCA. Fluent Portuguese, good French, some Spanish. With sound manufacturing company experience in Kenya and Portugal. Seeking a career development with a larger company. **Age 38 Salary £10,000+**

12. **Divisional Accountant.** ACCA. ACMA. A vigorous financial manager with wide international experience of building and construction contract management for the major groups. Seeking a further overseas contract. **Age 55 Salary circa £16,000**

MARKETING

13. **Area Manager.** Fluent French, German and Spanish. A most successful international sales manager in the food and drink industries with responsibility for Scandinavia, E. Europe and Caribbean. A determined and articulate high-flyer seeking greater responsibility with a more ambitious company. **Age 22 Salary £6,000+**

14. **Export Salesman.** BA (Oxon). Fluent German good French, some Russian. Well educated, intelligent and articulate he has successfully opened up a new market in Germany for a small company. Now wishes to expand his experience. **Age 25 Salary £6,000+**

15. **Export Salesman.** Fluent German, French and some Cantonese. Successful experience in selling office and reprographic equipment to Scandinavia, Middle East and Australia. A sound steady export salesman who wishes to improve his remuneration. **Age 26 Salary £6,000**

16. **Export Salesman.** MA (Cantab) Hons. MBA. An intelligent and ambitious young man with 3 years experience in retail, food and grocery sales. Seeking career development. **Age 26 Salary £6,000+**

17. **International Marketing Executive.** BSc (Hons) Sciences. MSc Business Admin. Fluent Hungarian. Good French. A 'high flyer' with six years sound international marketing and consultancy experience in high technology and heavy industry, now seeking a progressive line appointment. **Age 28 Salary £13,000+**

18. **Sales Director.** MA. Good French. 1st Hons. Nat. Sciences. Impressive record in international sales of engineering products, especially automotive. Promotion blockage, seeking career development in engineering leading towards general management. **Age 31 Salary £16,000**

19. **Regional Manager Export.** BSc (Prod. Eng). Bilingual French. Considerable sales engineering experience of capital equipment in the mining type of industries in Europe and Scandinavia. Seeking greater responsibility in either a French or British company. **Age 39 Salary circa £12,000**

20. **Sales/Marketing Director.** BSc (Hons) Elect Eng. MBA. Some French and German. With substantial sales experience in both manufactured and service products. Recently reorganised a large sales force. As a high flyer he now wishes to progress his own career in either the durable or service industries such as computer time sharing. **Age 29 Salary £8,500+**

21. **General/Marketing Director.** A highly intelligent and most likeable senior executive whose wide range of sales management experience covers automotive products in Europe, building services, the leisure industries and glass. Seeking career development and increased remuneration. **Age 35 Salary £12,500+**

22. **Export Sales Director.** An experienced and successful record in fast moving consumer products such as foods, toys, electrical goods to worldwide markets. Seeking further career development. **Age 42 Salary £12,000**

23. **General/Sales Manager.** BA (Oxon) Hons. Chem. Good French. A tall and most impressive area manager with an excellent understanding of man management in a major international sales and manufacturing company. Wishes to develop his career into general management. **Age 36 Salary £10,000+**

GENERAL MANAGEMENT

24. **General Manager.** MA Eng. Sciences. MSc. An impressive and practical manager with experience in the freight, travel and leisure industries and four years in electric motor production. A dedicated profit orientated businessman seeking further career development probably within a large group. **Age 33 Salary £12,500+**

25. **Corporate Planner.** BA (Econ) Hons. MSc (OR and MS). Fluent French, good German. A highly numerate and intelligent executive with large scale marketing and distribution experience and as an internal and external consultant. Seeking further career development. **Age 28 Salary £11,000+**

26. **International Executive.** BSc (Hons) Sciences Dip. Business Admin. Has 12 years experience in two major worldwide manufacturing groups involving funding and planning for 25+ operations in numerous countries. A highly practical head office man with a good science degree. Seeks greater responsibility leading towards general management. **Age 29 Salary £11,000+**

27. **Production Manager.** BSc (Eng) MSc (Chem. Tech), Dip IR. A highly successful man with four years in fmcg production and five years in steel plate. Promotion blockage – seeking career development ideally in consumer products or process industries. **Age 26 Salary £10,000+**

28. **Electrical Design Engineer.** BSc. With worldwide experience in the provision of electrical services up to 200 MW for the mining process and contracting industries especially in Africa. Seeking career development towards project management. **Age 29 Salary £7,500+**

29. **Business Development Manager.** An impressive highly numerate manager with major manufacturing group experience over five years in policy planning for products, manufacture, pricing and new business in the automotive related industries. Promotion blockage. **Age 31 Salary £8,500+**

30. **Young Manager.** BA (Business Studies), MSc. Highly numerate with experience of venture capital management and all forms of auditing. An impressive 'team leader' with sound commonsense and an excellent appreciation of 'man management'. **Age 30 Salary £8,500+**

31. **Senior Project Engineer.** MIPHE. MRSH. FIOP. A tough and experienced water engineer for large and small projects in the Middle East and Africa. Seeking increased remuneration, ideally overseas. **Age 35 Salary circa £10,000**

32. **Personnel Manager.** BA(Oxon), MIPM. Large group experience includes management development, training and performance appraisal. Wishes to become more closely involved in the toughest type of I.R. areas to widen his professional skills. **Age 41 Salary £10,000**

33. **General Manager.** BSc Civil Eng. MICE C. Eng. LLB. MBA. Fluent French and Italian. An experienced large group engineer with management experience in the Gulf, Libya, Malaysia and UK. **Age 37 Salary £10,000**

34. **General Manager** (Shipping). Fluent Dutch and French, good German. 12 years experience of shipping and transport management for major group operating in Far East, Africa, Middle East. Wishes to be based in Europe. **Age 34 Salary £15,000**

NOTES
(i) All the above executives have been interviewed by us and we consider them to be high quality material in their particular range – there are several others whom space precludes.

(ii) If you require an executive of similar capability please contact me.

(iii) If you yourself feel that you match these standards and might benefit from a new opportunity please contact me in the strictest confidence and without any obligation.

Robin R. Whalley

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Home news

Midland and NEB form joint finance company

Midland Bank and National Enterprise Board (NEB) have joined forces to help small businessmen in the north-east of England. In Newcastle on 23 August they announced the formation of a joint company called Newtown Securities (Northern) Ltd which, with an initial capital subscription of £250,000, aims to provide development finance for small businesses who have exhausted conventional borrowing facilities and may experience difficulty in attracting outside investment.

The scheme is experimental and the risks inherent in the venture are recognised; nevertheless both Midland and NEB believe that they have identified a gap in the market which can be bridged by the deployment of their combined experience and resources. The results of the scheme will be carefully monitored and, given success, it is expected that the initial capital base would have to be increased.

Finance will be made available through the medium of loans, possibly carrying equity options, ranging in amount between £5,000 and £25,000. Introductions will be considered from any source, although it will be necessary for the operation of the scheme that the successful applicants' banking business be with Midland.

The scheme will be administered through Midland's regional head office in Newcastle and applications for facilities will be considered by the board of Newtown Securities based in the same city. If approved, funds will be lent by Midland against the guarantee of Newtown Securities (Northern) Ltd.

Montotype, NEB and Barclays Bank form holding company

Agreement in principle has been reached between the National Enterprise Board, Barclays Bank, Keyser Ullman and the present shareholders of the Monotype Corporation Ltd (Monotype) to form a new parent company, provisionally called Monotype Holdings Ltd (MHL), to own all the shares of Monotype. The new company's principal shareholders will be the National Enterprise Board and Barclays Bank, each owning an initial 37.5 per cent. The remaining 25 per cent will be held by the new management to be introduced.

Monotype has developed a new generation of laser photo-typesetters which has received wide customer acceptance. This important new UK technology, with its related input edit equipment and software, has created the need for substantial additional funds. In view of the requirements of the new technology, the Monotype management feel the group can only be viable financially with substantially reduced manpower levels. The NEB has accepted this recommendation and is prepared to provide the necessary additional fund when a suitable staffing level has been agreed between Monotype and the unions. Those negotiations with the unions are now underway.

NEB and Ferranti in joint resin venture

The National Enterprise Board and Ferranti Ltd have announced the formation of a new joint company to be called Ferranti Resin Ltd to acquire the assets of Vetro Resin Engineering Ltd (now in receivership) at Peterlee, Co Durham and also the insulation department of Ferranti Ltd at Hollinwood. Production at Peterlee has now restarted.

The joint venture will broaden the Ferranti base in resin technology and tube manufacture. The insulation department of Ferranti Ltd at Hollinwood is the largest UK manufacturer of resin impregnated tubes for the electrical industry and Vetro Resin has the capacity to manufacture large glass-fibre storage tanks for the chemical and allied industries.

Ferranti Ltd, which is an NEG subsidiary, will own 51 per cent of the new company and the NEB will subscribe £294,000 for 49 per cent of the ordinary share capital.

Certificates of service for UK deck officers

Applications for certificates of service are invited from uncertificated deck officers and certain certified deck officers in the UK merchant navy, from 1 September by the Department of Trade.

Certificates of service will be issued to all merchant navy deck officers who are serving in capacities which will need certificates of competency under present UK law, but which will need certificates of competency after September 1981, when important changes in the UK shipping law come into force. The department wishes to start considering applications well in advance in order to avoid a last-minute rush.

Officers will need to satisfy the department that they meet the requirements in the regulations as to their service and experience and, in the case of masters and mates, their nationality.

The majoriy of deck officers already holding merchant navy certificates of competency issued by the Department of Trade (or certificates of competency accepted by the department as equivalent) and who are sailing in foreign-going ships will be unaffected by the regulations.

New insurance arrangements for nuclear sea dumping

From next year the United Kingdom Atomic Energy Authority (UKAEA) will be allowed directly to issue full indemnities for any claims made against ship-owners as a result of nuclear damage or injury caused by the disposal of nuclear waste materials at sea from their ships.

This arrangment is described in a document ('Minute dated 17 August 1978 concerning an indemnity by the United Kingdom Atomic Energy Authority to certain ship-owners in respect of the dumping of solid radioactive waste at sea', Cmnd 7316, HMSO, 20p) laid before parliament by Tony Benn, Secretary of State for Energy on 17 August.

At present, the UKAEA has to seek government approval before giving unlimited indemnities to ship-owners involved in sea disposal operations. In future, the UKAEA will be able to provide such indemnities without prior government approval.

But the UKAEA will be allowed to issue such indemnities directly to ship-owners only if the terms of these indemnities remain as they are now. If, in the future, substantial changes are proposed to the arrangements, the UKAEA will have to seek the agreement of the Department of the Environment.

Dangerous-goods advisory group formed by CAA

A dangerous-goods advisory group has been set up by the Civil Aviation Authority to assist it in reviewing the requirements controlling the carriage of potentially dangerous materials by air. The group will also assist the authority in deciding UK policy regarding the international standards relating to the carriage of such goods which are to be produced by the International Civil Aviation Organisation (ICAO).

The dangerous goods advisory group comprises representatives from; Civil Aviation Authority, British Airways, British Caledonian Airways Ltd, Transmeridian Air Cargo Ltd, British Air Line Pilots Association, British Shippers' Council, Institute of Freight Forwarders, Chemical Industries Association, PIRA (packaging industry), Health and Safety Executive, Laboratory of the Government Chemist, Department of Transport, Department of Trade.

The address of the secretariat for the group is: Civil Aviation Authority, Flight Operations 4(b), (Dangerous Goods Section), Rooms 315-316, Aviation House, 129 Kingsway, London WC2B 6NN, tel. 01-405 6922 ext. 292-293.

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Development board launches industrial directory

Well over 500 firms who are manufacturing or supplying a wide range of products in mid Wales are listed in a new comprehensive industrial directory which has just been produced by the Development Board for Rural Wales.

The directory is intended to help the public identify more clearly the wide variety of products now available in the region and includes ICI, Tootal, Laura Ashley, Vickers, Dowty and Smiths Industries plus a host of smaller firms. Apart from the many manufacturers of food, clothing, concrete products, quarries, fabricators and mechanical engineers there are others doing unusual things. Clogs from Tregaron, stone ground flour from Newcastle Emlyn, marzipan cake decorators from Both, glass specially engraved in Hay-on-Wye for a wedding or anniversary, and from Welshpool pure handspun Samoyed dog combings, dyed with local plants and made into jackets, mitts or slippers.

The directory has been compiled with the agreement and co-operation of the various district and county councils in mid Wales. Special tribute is paid to the planning department of Powys County Council who made a major contribution by undertaking the arduous and detailed work of compiling the entries.

Firms are listed on a district basis and with an indication of their products. The entries have been divided into product categories for easy reference and where a firm produces or supplies more than one product there is a full description of its whole range under each category.

The directory is available from the Development Board for Rural Wales price £1.00.

Merger proposals cleared

Secretary of State for Prices and Consumer Protection, Roy Hattersley, has decided, on the information at present before him, not to refer the following proposed mergers to the Monopolies and Mergers Commission under the provisions of the Fair Trading Act 1973:

Covina NV and Marryat Group Ltd. Hollandshe Beton Groep NV and Edmund Nuttall, Sons and Co (Manchester) Ltd. Travis and Arnold Ltd and Ellis and Everard (Building Supplies) Ltd. Thomas Tilling Ltd and Fluidrive Engineering Company Ltd. Associated Engineering Ltd and Fluidrive Engineering Company Ltd.

Encouraging the smaller firm in Scotland

Special characteristics, problems and growth potential of companies in Scotland employing under 200 people will be discussed at a two-day conference 'Influencing business growth' the Scottish Council (Development and Industry) is to hold at Gleneagles on 3 and 4 October.

The conference, the second in a series on encouraging the smaller firm, will be in two parts. The first will discuss the new opportunities open to smaller companies and how attitudes to small firms are changing. The second will show how small companies can capture the new markets they need to expand. Speakers will include Peter Lennon, head of the EEC directorate concerned with small and medium-sized enterprises, A. C. McCarthy, consul-general in Stuttgart, Professor George Burnett, principal of Heriot-Watt University, David Mitchell MP, Edward B. Cunningham, director of Strategic Planning of the Scottish Development Agency, and Gordon Manzie, under-secretary at the Scottish Economic Planning Department. The sessions will be chaired by Peter Balfour, chairman of the Scottish Council and by Professor Sir Kenneth Alexander, chairman of the Highlands and Islands Development Board.

Official appointments

Gas Consumers' Council. Secretary of State for Prices and Consumer Protection, Roy Hattersley, has announced appointments to the Welsh Consumer Council, which is chaired by Ms Beata Lipman. The following have agreed to be members; the appointments are for three years until July 1981:
Dr Margaret Evans, Anne March, Ceinwan Parry, Beryl Williams, David Foulkes, councillor Peter Law.

Heathrow taxi leaflet lists recommended fares

Recommended one-way fares for taxi-cab journeys between Heathrow Airport-London and nearly 180 towns and villages throughout southern England are listed for the first time in a new leaflet published by British Airports for the guidance of British travellers and foreign visitors.

The leaflet, 'Heathrow Airport Taxi Information', lists a range of recommended fares for the most frequently requested destinations outside the Metropolitan Police district. They include a fare of £7.50 to the village of Iver, Bucks, a few miles from the airport's passenger terminals, and £58.25 for a journey to Ipswich, about 100 miles by road.

The fares are recommended by the Licensed Taxi Drivers Association, the Owner Drivers Society and the cab section of the Transport and General Workers' Union as 'fair and reasonable'.

But British Airports emphasise that there is no formal price structure for licensed taxi-cab journeys outside the Metropolitan Police area.

Further information on the hiring of taxis at Heathrow, together with a map of the Metropolitan Police district and the 20-mile radius of obligatory journeys from Heathrow is contained in the leaflet, which carries translations of the text in French and German.

More competition needed in animal feeds

More price competition and more information for farmers are needed for efficiency in the animal feeding-stuffs industry. These are among the conclusions of the Price Commission report that have been discussed by the Department of Prices and Consumer Protection, in conjunction with the Ministry of Agriculture, Fisheries and Food, with representatives of the United Kingdom Agricultural Supply Trade Association Ltd and the National Farmers Union.

Announcing the outcome of the discussions on 21 August, Secretary of State for Prices and Consumer Protection Roy Hattersley said that the Price Commission had found evidence of price co-ordination by six of the seven leading suppliers. Consequent inquiries by the Director General of Fair Trading had disclosed an unregistered and therefore unlawful agreement between a number of the major suppliers. The director general proposed to take proceedings in the Restrictive Practices Court against those in default for an injunction restraining the continuance or repetition of this action. In addition, the Monopolies and Mergers Commission were to consider in connection with their current study of discounts the Price Commission's comments on the use of loyalty discounts by the market leader in this sector.

The need for improved information on feedstuffs constituents, trading terms and price competition was referred to in the report (Prices, Costs and Margins in the Production and Distribution of Compound Feeding Stuffs for Cattle, Pigs and Poultry (HC 338) published 20 April 1978, HMSO, 85p). These matters have been discussed with the trade and any appropriate action now rests with them. Suggestions that farmers should become more aware of price differentials and how farmer's co-operatives might increase their share of the market are matters for the appropriate bodies representing farmers' interests. A further suggestion that, with the help of the Agricultural Development Advisory Service (Adas), farmers should consider the alternative of increased home mixing of compounds, has been discussed with the Ministry of Agriculture, Fisheries and Food, and their Adas officials will be taking account of this recommendation when giving advice to farmers.

Work starts at Goldthorpe

Work will soon start on three advance factories for the Department of Industry on the department's site at Goldthorpe Industrial Estate, near Barnsley. These factories are of the terrace unit type, two of which are 450 m^2 each, and is capable of division into two. The other one is 1350 m^2 and is capable of division into six. The factories should be completed ready for occupation by the end of March next year.

Inquiries regarding lease should be addressed to Regional Director, Department of Industry, Yorkshire and Humberside Region, Priestley House, Park Row, Leeds, LS1 5LF, tel. 0532 443171.

. . . and in Bishop Auckland factory

Work is about to start on an advance factory of about 900 m² for the Department of Industry on the Greenfields Industrial Estate, Bishop Auckland, Co Durham. Work is expected to start at the beginning of September and the premises should be ready for occupation in May next year.

Inquiries regarding purchase or lease should be addressed to: Regional Director, Department of Industry, Northern Region, Stanegate House, Groat Market, Newcastle upon Tyne NE1 1YN, tel. 0632 24722.

Patents recorded 'licences of right'

Under section 46 of the Patents Act 1977 the Register was noted 'licences of right' in respect of the following patents on the date specified:

15 August 1978

1491196 Agfa-Gevaert
Method and apparatus for processing photographic silver halide material.
1494741 Agfa-Gevaert
Fog-inhibitors for silver halide photography
1402214 Poclain
Device for feeding a hydraulic Load element mounted on a telescopic structure, by means of two jacks
1411464 Poclain
Detachable tooth for earth moving machinery
1186367 C J Sims Ltd
Improvements in or relating to building construction
1360602 Terence Patrick Priestley
Improvements in or relating to apparatus for dispensing Liquids
1389583 Paul Lucien Coutellier
Sanitary Appliance
1441406 Bayerische Motoren Werke Aktiengesellschaft
Motor Vehicle Body having a Bonnet and at least one fresh air inlet opening arranged in front of the Windscreen
1479594 EMI Ltd
Improvements in or relating to ultrasonic image Pick-up tube arrangements
1494046 Kurt Stoll KG
Improvements in sanding devices
1505486 BFG Glassgroup
Bending vitreous sheets

17 August 1978

1354787 Sumitomo Chemical Company Ltd
Improvements in processes for producing methacrylonitrile
1370223 Sumitomo Chemical Company Ltd
Improvements in methods of treating waste gases
1451290 Sumitomo Chemical Company Ltd
Selective removal of nitrogen oxides from waste gases
1454326 Sumitomo Chemical Co Ltd
Method for the removal of harmful materials from waste gases
1466789 Sumitomo Chemical Co Ltd
Catalytic removal of oxides of nitrogen from waste gases
1472219 Sumitomo Chemical Co Ltd
Process for the selective removal of nitrogen oxides from waste gases containing sulphur oxides
1476347 Sumitomo Chemical Co Ltd
Method for treating ammonia-containing gases
1480657 Sumitomo Chemical Co Ltd
Process for concurrently treating process waste waters and flue gases from ammonia synthesis
1193369 International Standard Electric Corporation
Information storage arrangement
1282793 International Standard Electric Corporation
Electronic switching system
1441536 International Standard Electric Corporation
Wiring of clock-controlled electronic equipment
1444306 International Standard Electric Corporation
Data processing system
1466433 International Standard Electric Corporation
Data insertion device
1443944 Standard Telephones and Cables Limted
Optical Filters
1467805 Standard Telephones and Cables Limited
Improvements in or relating to electrical control systems
1478152 Standard Telephones and Cables Limited
Light emissive diode
1478974 Standard Telephones and Cables Limited
A meter for measuring an input by reference to two reference quantities
1183494 Chrysler United Kingdom Limited
An improved gear control lever mechanism
1202898 Chrysler United Kingdom Limited
Improvements in panels
1273354 Chrysler United Kingdom Limited
Improvements in or relating to induction manifolds for multi-cylinder engines
1234449 Chrysler United Kingdom Ltd
Vehicle wheel braking systems
1201942 Chrysler United Kingdom Limited
Improvements in carburettor control
1059050 James H Anderson and James H Anderson Jnr.
Method and apparatus for obtaining power from a naturally occuring body of water
1118885 James Hilbert Anderson
System for heat transfer at equalized pressure
1204769 James Hilbert Anderson
Submersible pipe
1208518 Schottel-Werft Josef Becker K.G.
A driving device for a steerable propellor for a marine vessel
1243710 Schottel-Werft Josef Becker K.G.
Hopper barge with hingeable bottom halves
1327026 Terence Arthur Middleton and Terence Patrick Priestley
Improvements in or relating to apparatus for dispensing liquid in measure quantities
1391149 Hans Meyer
Improvements in or relating to a length-measuring instrument
1408791 Licentia Patent-Verwaltunge G.m.b.H.
Method of selectively filtering polychromatic light beams
1412078 International Trading Co inc.
Universal coupling and masses coupled thereby
1423640 Societe Des Mines Et Fonderies De Zinco De La Vieille Montagne S.A.
A process for the treatment of a material containing zinc and soluble silica
1453718 John Derek Bolton
Improvements relating to boat trailers

Any person who claims that the proprietor of the patent is, and was at the time of entry, precluded by a contract in which the claimant is interested from granting Licences under the parent may, within three months after the making of the relevant entry, apply to the Comptroller on patents form 31/77 for cancellation of the entry.

I. J. G. Davies, Comptroller

Government Sales

12 and 13 September 1978 – Miscellaneous stores

Location:
Ordnance Storage and Disposal Depot, Ruddington Notts

Auctioneers:
Arnold and Son (Dept L), 13 Market Place, Burton-upon-Trent, Staffs (0283 64657)

Aircraft components and ground equipment and electronic equipment and spares, furniture, textiles, tyres, machine tools, binoculars, watches, photographic equipment, wooden and metal boxes and a large collection of other miscellaneous items.

Catalogue price 40p, postage 15p.

20 September 1978

Location:
Garrison Theatre, Tidworth, Hants

Auctioneers:
Austin and Wyatt (Dept L), 79 High Street, Fareham, Hants (0329 234211)

The sale consists of mainly small or single item lots of furniture.

Catalogue price 20p, postage 10p.

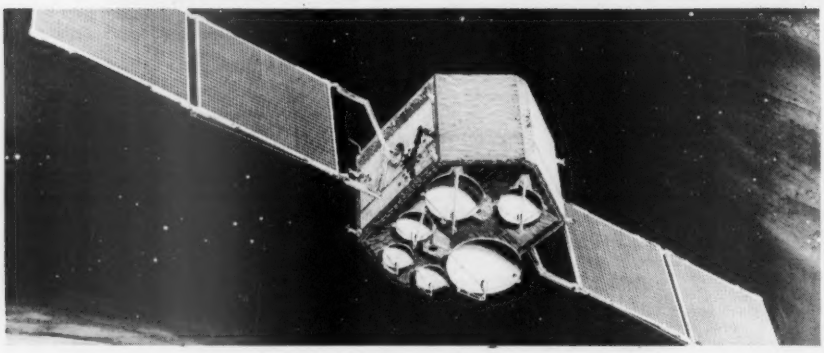
Catalogues, which give details of the lots, conditions of sale, viewing times etc, are available from the auctioneer from two weeks before and up to the day of the sale.

WEMBLEY AUCTION SALES 1978

5 September 1978

View Days:	Day preceding and morning of sale
Location:	Department of the Environment Property Services Agency Supplies Stores India Pavilion Exhibition Grounds Wembley, Middx. Tel. 01-903 2508
Description of Goods:	Miscellaneous office equipment and furniture etc. (Potential buyers are advised to refer to the official catalogue available from the auctioneers, price 20p.)
Auctioneers:	Messrs Hollingsworth Westcombe House 56/58 Whitcomb Street Leicester Square London WC2H 7DR Tel. 01-839 1875

British industry in space



European satellites are now operating successfully in orbit, demonstrating the high technical competence of British and other European space firms. Ted Mallett, previously director of space activities and now head of research and technology requirements and space division at the Department of Industry, describes the government's attitudes and intentions in space, stressing the significance of Britain's involvement with other European countries.

The application of space systems, particularly those for telecommunications and earth observations, will increase in importance as we move towards the end of this century. The international Intelsat system has been in operation for a number of years and the traffic it carries is increasing exponentially. Some nations already have domestic and regional satellite communications systems while others are defining requirements and planning for them; the potential value of this developing market is considerable.

A worthwhile share of this market can be captured by Britain and her European partners provided that an adequate level of investment in space technology research and development is maintained, a level unlikely to be achieved by any one European nation on its own.

Goonhilly ground station, recently completed by Marconi Communications Systems Ltd, for the orbital test satellite.

The Department of Industry spends some £35 million a year on civil space activities of which £31 million is invested in the programmes of the European Space Agency (ESA). Formed in 1975 at the initiative of the United Kingdom, the agency's aim is to promote and provide, for exclusively peaceful purposes, European co-operation in space activities. It was considered that the creation of a single agency entrusted with the design, development and procurement of pre-operational satellites as well as the execution of a scientific programme of high technological content, was a necessary rationalisation of European space activities.

Membership of ESA affords Britain the opportunity of participating in a number of different programmes, the wide variety of which would otherwise be too costly for us to undertake alone. In undertaking these programmes, the agency aims to create an industrial policy for the European space industry and to avoid wasteful duplication of effort between member states. We believe that membership of ESA offers the best prospects for strengthening the British space industry, both technologically and commercially, by blending it into a European force capable of competing in worldwide markets.

The department funds the major share of the United Kingdom contribution to the European Space Agency. The balance of £8.5 million is provided by the Science Research Council. As a result of these contributions to the agency's budget, the agency places research and development contracts with British firms. All member states contribute to the agency's mandatory activities, which include the science programme, on a scale in proportion to their gross national product. The agency also undertakes optional programmes of satellites and other development projects to which member states contribute in proportion to their degree of interest.

Within the framework of ESA, Britain concentrates its financial support on development programmes offering the greatest potential for future commercial exploitation. On the basis of current assessments of possible future markets, Britain has placed the emphasis on communications satellites such as the orbital test satellite (OTS) for communications experiments, the European communications satellite (ECS) for European regional communications, Marots for maritime mobile communications and the 'heavy' satellite for direct television broadcasting. Support has also been given to earth observation programmes. These include Meteosat, Europe's first weather satellite and contribution to a world system, as well as Earthnet, a network of European ground stations for the reception and processing of data from the United State's National Aeronautical and Space Administration (Nasa) earth observation satellites.

During the past year, four of the agency's satellites have been launched; Isee 'B' and Geos 2 in the scientific series for magnetospheric research, OTS-2 for communications and Meteosat for weather observation. All four satellites are operating in orbit according to specification, and their success demonstrates the high level of technological competence that has been achieved by the European space industry. The agency's other programmes include Spacelab, a manned space laboratory which will be carried aboard Nasa's space transportation system, and Ariane, a satellite launch vehicle. The first Spacelab mission is planned for 1980 and the crew will include the first western European to travel in space. The first flight of Ariane is planned for 1979.

The activities of the European Space Agency are devoted primarily to satellites. However, it is a general characteristic of satellite systems, particularly those intended for communications, that considerable investment must also be made in earth stations which are necessary to pass signals to and from the satellite. The Department of Industry supports the development of ground segment technology under the terms of its space technology programme.

This programme is jointly funded with industry and consists of a priority selection of space technology research and development. A major item is the development of a 19 m-dish earth station at Goonhilly to operate to ESA's OTS satellite. The station is jointly funded by Marconi Communications Systems Ltd, the Post Office and the department. In addition to providing support for the development of the ground segment, the space technology programme is intended to keep British firms up-to-date technologically, so that they can

participate more effectively in ESA and other international space programmes.

An essential element of this national programme is the maintenance of an intramural centre of expertise in the space department of the Royal Aircraft Establishment, Farnborough. In addition to managing the department's space technology programme in industry, the space department assists firms with specific developments, undertakes advanced research for subsequent transfer to industry and offers a range of special facilities for space simulation, testing and data processing. Recently it was chosen as the Earthnet facility for the reception of data from Nasa's Seasat earth observation satellite which was launched in June 1978.

Responding to the challenge

British space firms can now offer a comprehensive range of systems and sub-systems in both space and on the ground to meet any customer requirement. Between them they have been involved in no less than 50 satellites, 63 ground stations and about 1300 sounding rockets. Peter Hickman, of British Aerospace Dynamics Group and chairman of the United Kingdom Industrial Space Committee, outlines the UK's capability in space in the context of some current achievements.

The United Kingdom Industrial Space Committee (Ukisc) is an association of all those companies who have a commitment to respond to the technological challenge of space and in so doing provide improved services to the community at large – be it the research scientist, the meteorologist, telephone subscriber or ship's captain. It provides a focus for discussion between sponsoring government agencies, user organisations such as the British Post Office, and industry.

The skills of the member companies range from the ability to provide the smallest micro-miniaturised electronic component to that of providing a complete satellite telecommunications system, including the ground segment.

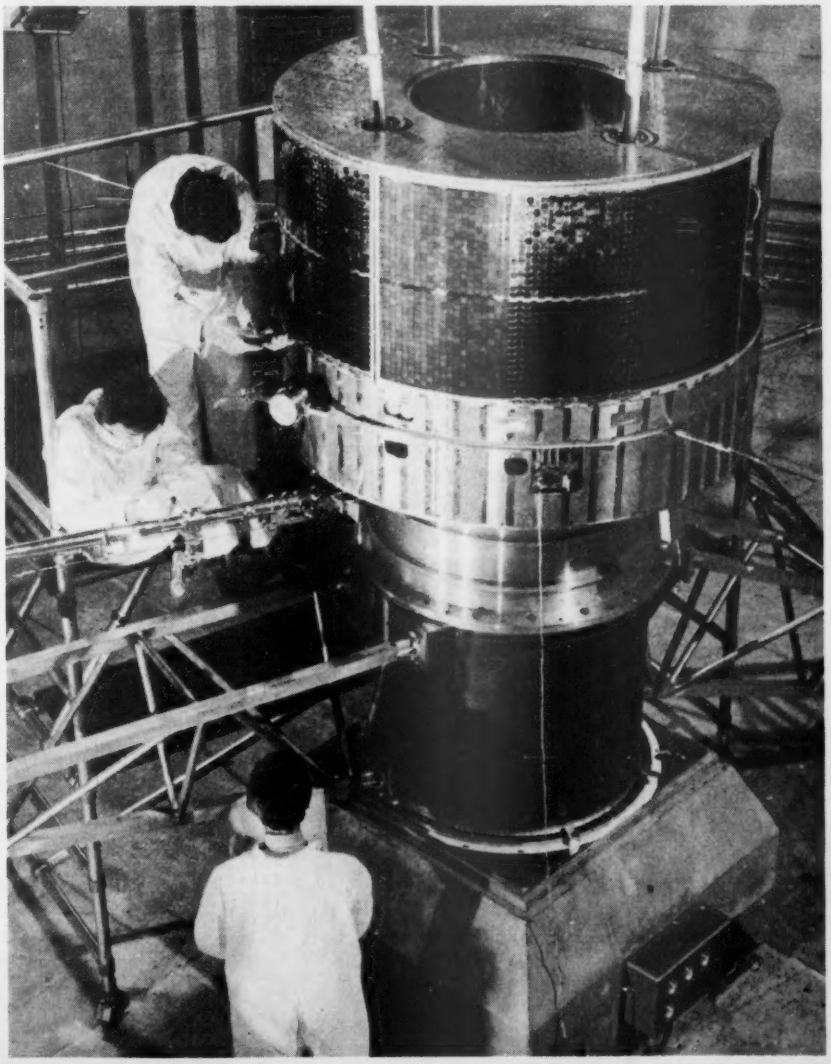
It is an outward-looking organisation, not only because it is continually searching for overseas markets, but also because it recognises that co-operation with continental Europe through the European Space Agency (ESA) and other agencies is an important aspect of its future. ESA is the successor of two organisations – the European Space Research Organisation (Esro) and the European Launch Development Organisation (Eldo). For this reason, the major companies are members of the three European consortia, Cosmos, Mesh and Star. The consortia include members from all the major aerospace and electronics companies of Europe which combine their resources to undertake major contracts for ESA. Marconi Space and Defence Systems is the leading British member of Cosmos, and British Aerospace Dynamics Group represent the UK in Mesh and Star.

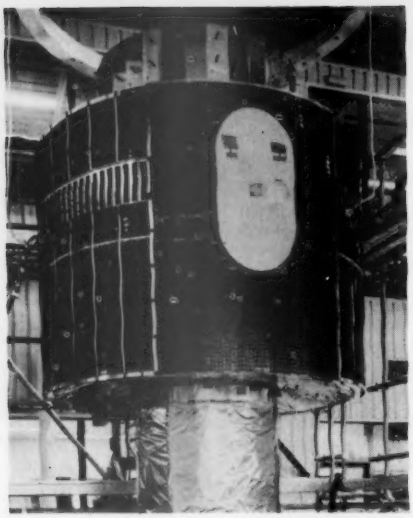
What follows deals mainly with present programmes, either in operation or development, and how the future looks. In order to set the background for that discussion something needs to be said of past achievements. A detailed review would be lengthy, since the UK effort in space started in the late fifties, so here I will mention only some of the highlights.

British Aircraft Corporation and Hawker Siddeley Dynamics, as they then were, now part of British Aerospace Dynamics Group, were responsible for the first UK-built and first Esro satellites, UK 3 and Esro 2, in 1962. Marconi Space and Defence Systems is the first European company to provide a satellite, the UK Skynet 2 for defence purposes, whilst its sister company, Marconi Communication Systems, has provided to many countries throughout the world, large earth stations which receive, transmit and process signals to and from the international satellite communication system established by Intelsat. Plessey is also active in the ground segment, in particular, data handling and reduction from scientific and earth observation satellites.

Standard Telecommunications Laboratories has recently been awarded a contract by the Ministry of Defence to build the first UK airborne receiver for the Navstar multiple satellite global positioning system and are also working on associated adaptive airborne aerials. Other companies, notably Ferranti in the solar cells field, have supplied components for these programmes. Efforts have not been restricted to the space segment alone. Hawker Siddeley Dynamics was responsible for the successful first stage of the Eldo launch vehicle and now, as British Aerospace Dynamics Group, together with Ferranti and Marconi Space and Defence Systems, participate in the Ariane programme. This is a launcher being developed under the industrial leadership of French companies and is capable of injecting satellites weighing approximately 2000 kg into geostationary orbit.

Geos 2 satellite under test in the electromagnetic cleanliness facility at British Aerospace Dynamics Group, Bristol. This satellite was launched successfully on 14 July.





Meteosat, Europe's first weather satellite, for which Marconi Space and Defence System was prime contractor.

British Aerospace Dynamics Group also provides launch opportunities to scientists and other users on the Skylark rocket.

An improved appreciation of the strength and depth of the UK industry's space expertise can probably best be obtained by briefly reviewing the role that it has played in some of ESA's immediate past and present programmes.

Geos is the largest and perhaps the most complex scientific satellite launched so far in ESA's programmes. It is placed in geostationary orbit (hence its acronym) and measures, for example, plasma densities, electric fields and ion compositions, in that region of space where the magnetic field of the earth still plays a dominant role. It has a complex deployable boom system which is extended in orbit over a period of 14 days and has to undergo before launch most rigorous electromagnetic tests in the Bristol facility of British Aerospace Dynamics Group. After the partial failure of the US launch vehicle and the consequent inability of Geos 1 to obtain its correct orbit, Geos 2 was launched on 14 July and is now operating successfully in geostationary orbit. British Aerospace Dynamics Group was prime contractor for this programme as well as providing the attitude and orbit control sub-system and other equipments. Despite the problems experienced with its launch, Geos 1 nevertheless produced valuable results and the scientific community is now awaiting the data from Geos 2 with the greatest possible interest.

Still in the field of science, British Aerospace Dynamics Group has been awarded a major part in one of the most important space projects of the 1980's. This is the Nasa/ESA space telescope which will fill the cargo bay of the Shuttle Orbiter and be placed in space from it in 1983. British Aerospace is providing the solar arrays which are several times larger and more complex than anything previously produced in Europe, plus the very advanced photon detector assembly which is part of the telescope's instrumentation.

Meteosat, Europe's contribution to a global system of geostationary meteorological satellites, was launched in November of 1977. It carries a sophisticated instrument which measures radiation from the earth in the infra-red, visible and water vapour bands. The information thus gathered is being telemetred to meteorological users in Europe and the United States and allows them to make significant improvements in the models on which weather forecasts are made and also provides valuable short-term data.

Marconi Space and Defence Systems was responsible for the very accurate attitude and orbit control sub-system for this spacecraft as well as providing the uhf elements of the communications sub-system and major elements of the radiometer.

OTS (an acronym for orbital test satellite) is ESA's first communications satellite programme. The second flight model was successfully launched on 11 May after the first satellite had been destroyed by a failure of the United States launch vehicle.

OTS is the forerunner of the European communication satellite (ECS) on which Europe's operational satellite communication system will be based. OTS will demonstrate the successful functioning of advanced communication technology being used on the satellite which is necessary to satisfy the demanding standards of European post, telegraph and telecommunication administrations. It will also demonstrate the ability of the spacecraft bus, which provides essential services such as power, attitude control and data handling, to support the telecommunication mission for a period of many years – the current forecast is that the OTS 2 will last for up to six years. For this satellite British Aerospace Dynamics Group was prime contractor as well as supplying major sub-systems and equipments. British Aerospace is also prime contractor for ECS.

After a very successful commissioning period the test programme, which is to be conducted by a large number of experimenters in the post, telegraph and telecommunication administrations, government establishments and universities, has commenced. In the UK a prototype 11/14 GHz station has been established at Goonhilly as a result of a tri-partite development contract between Marconi Communication Systems, Department of Industry and the Post Office. The station is of advanced design, and will assure very high standards of voice communication and television transmission. Ferranti has developed a critical component which is used in this station.

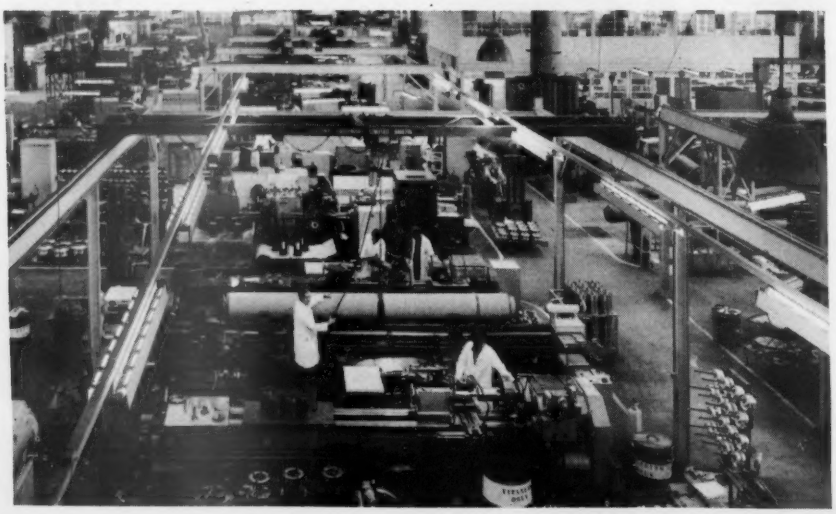
Both the orbital test satellite and European communications satellite are configured for operation between small, as well as large, stations which makes the satellite of particular interest to developing nations. Marconi Communications Systems has developed a 3 m antenna which forms a basis for the small terminals being installed for the high speed inter-computer tests between the Rutherford High Energy Laboratory and Cern and also between ESA establishments. Ferranti are also active in this field and visitors to Farnborough will see live transmissions via OTS to a small station supplied by them.

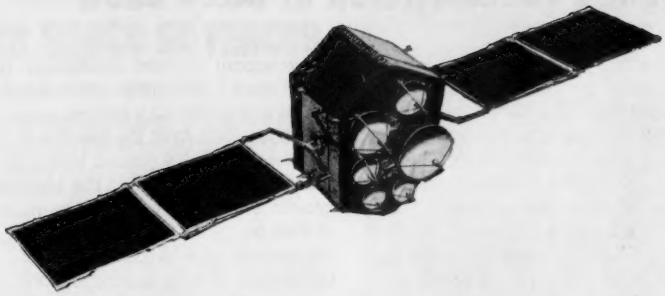
Under the leadership of British Aerospace Dynamics Group, the development of the operational ECS is already underway and the first satellite is to be launched in 1981. Final

Satellites with British prime contractors

Satellite	Launch date	Customer
Ariel 3	5 May 1967	UK/Science Research Council
Esro 2	17 May 1968	Esro
X 3 (Prospero)	28 Oct 1971	UK/Department of Industry
Ariel 4	11 Dec 1971	UK/Science Research Council
Esro 4	22 Nov 1972	Esro
X 4 (Miranda)	8 Mar 1974	UK/Department of Industry
Ariel 5	15 Oct 1974	UK/Science Research Council
Skynet 2	22 Nov 1974	UK/Ministry of Defence
Geos 1	20 Apr 1977	ESA
Geos 2	14 Jul 1978	ESA
OTS 1	13 Sep 1977	ESA
OTS 2	11 May 1978	ESA
UK 6	(1979)	UK/Science Research Council
Marecs	(1981)	ESA
ECS	(1981)	ESA

Bristol Aerojet production shop showing sounding rocket components and rocket motors in manufacture.

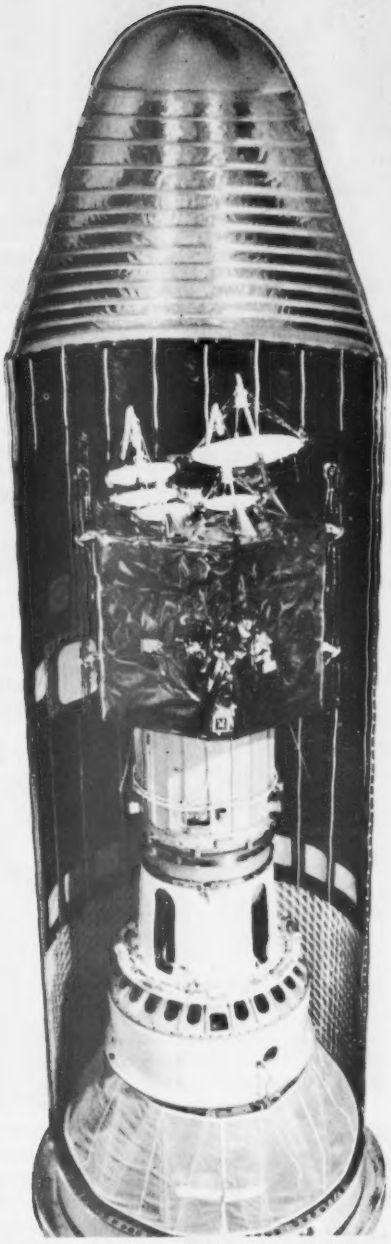


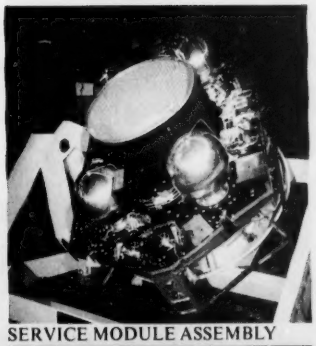


OTS ON STATION

The MESH Consortium led by British Aerospace Dynamics Group

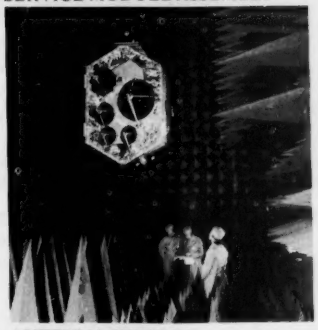
Complete Regional Communications systems



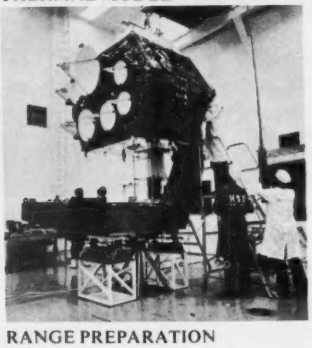


SERVICE MODULE ASSEMBLY

THERMAL MODEL



ANTENNA TESTING



RANGE PREPARATION

INSTALLATION FOR LAUNCH

British Aerospace Dynamics Group have successfully led the MESH Consortium in the building of the ESA Communications Satellite OTS. Launched on 11th May, 1978, OTS is operating most satisfactorily in orbit and has the capability of handling 5400 telephone circuits, telex and TV traffic.

British Aerospace Dynamics Group is also leading MESH in producing ESA's Maritime Communications Satellite MARECS and the European Regional Communications Satellite ECS. The modular design of these spacecraft provides an efficient "bus" capable of carrying payloads for communications services for individual countries or groups of nations with political, commercial or ethnic ties.

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Trials team examining two halves of fairings, designed and manufactured by British Hovercraft Corporation, which have been recovered following a successful space vehicle launching.

agreement between Eutelsat, an association of European post, telegraph and telecommunications administrations who will use the system, and ESA is hoped for by the end of this year. The coming into force of this agreement will demonstrate the users' confidence in the system and will be of great benefit to the European space industry in its efforts to export its products.

Marecs is a derivative of the European communications satellite which will provide reliable, high quality communication between ships and shore stations. The prime contractor for the programme is again British Aerospace Dynamics Group with Marconi Space and Defence Systems as payload prime contractor. The satellite uses the same highly reliable and accurately pointing bus as developed for ECS, whilst the Marconi payload incorporates transistor power amplifiers which allow the satellite to provide 30 to 40 voice channels to the demanding Inmarsat standard.

Inmarsat is the international organisation now being formed, to provide maritime satellite communications services. These satellites are expected to form part of the space sector of an international global maritime satellite system being prepared by the pre-Inmarsat joint venture and to be established around 1981 or 1982. A number of ship terminals now exist for use with the initial Inmarsat system – the first to be developed in Europe being the Marconi Arion terminal.

Over the past few years, policy within Europe with respect to space has undergone a fundamental change of emphasis to which the UK government and, hopefully, Ukisc, has contributed. Whilst the provision of the needs of the scientific community will continue to be a very important part of its charter, industry sees increasing opportunities to satisfy the requirements of the users of application systems be they post, telegraph and telecommunications administrations, meteorologists or conservation agencies.

Industry's first goal is to encourage the use of its capabilities by UK and European users on the basis of proven technical excellence and competitive prices. But it must be remembered that both industry and users are only at the very beginning of this process whose start is signalled by the launch of Meteosat and OTS. Further opportunities need to be explored with vigour and understanding on both sides if the challenges from competitors outside Europe in this strategically important area are to be faced.

On the basis of a healthy indigenous market, industry's second goal is to serve the needs of the rapidly developing market for space products throughout the world. It hopes to do so not only on the basis of the simple provision of a product but also on more intimate co-operation and exchange of technology. It believes that its achievements in Europe well fit it for this role.

Member companies of the United Kingdom Industrial Space Committee

Bristol Aerojet Ltd

British Aerospace Dynamics Group

British Hovercraft Corporation Ltd

Ferranti Ltd

Imperial Metal Industries (Kynoch) Ltd

Marconi Communication Systems Ltd

Marconi Space and Defence Systems Ltd

Normalair-Garrett Ltd

Rolls-Royce Ltd

Short Brothers and Harland Ltd

Software Sciences Ltd

Standard Telecommunications Laboratories Ltd

The Plessey Company Ltd

Satellites demonstrated at SBAC show

The Department of Industry is demonstrating two uses of space satellites at the 1978 SBAC show at Farnborough. In each case only one of the number of ways in which the satellite may be utilised is shown. One demonstration concerns ESA's orbital test satellite (OTS), while the other shows two facets of Meteosat, ESA's first weather satellite.

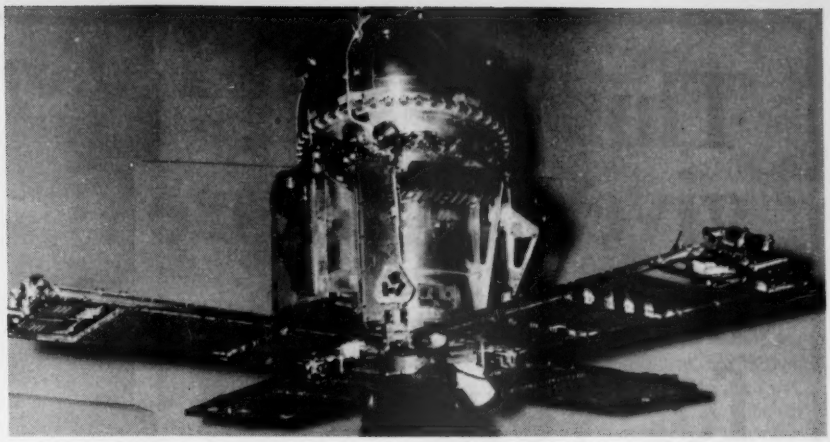
OTS is a communications satellite capable of carrying the equivalent of 5400 simultaneous telephone calls plus two television channels. It was built by the Mesh industrial consortium under the leadership of British Aerospace Dynamics Group. For demonstration purposes, tv pictures are being relayed from Rome, via the OTS satellite, to be received directly at Farnborough. The tv receive-only terminal used for this consists of a 3 m dish antenna together with the necessary electronics and tv monitor screen. The receiver, manufactured by Ferranti Electronics' solid state microwave group, is of modular construction which will allow it to be readily adapted for other purposes and for use with different satellites.

Meteosat, Europe's first weather satellite, was built for ESA by the Cosmos industrial consortium, the British member of which is Marconi Space and Defence Systems Ltd. The satellite regularly transmits images of the earth's surface which show cloud cover, and patterns of water vapour and heat distribution. To do this it uses a radiometer which scans the globe and builds up a picture every half-hour. Data from the satellite is received by ESA's ground facility at Odenwald and passed to the Meteosat ground computer system at Darmstadt. It is then processed by computer and transmitted back to the satellite for distribution directly to user stations. A typical user station is demonstrated at Farnborough. It consists of a 3 m dish antenna and receiver which separates the low resolution video data from the high resolution digital data. The video data is sent directly to a facsimile recorder producing pictures printed on paper.

For the purposes of the department's demonstration, the digital data is transferred to an electronic computer and image processing system with a tv display. Either single pictures or a sequence of pictures can be displayed and users can select various features of interest. The receiver and facsimile recorder have been provided by British Aerospace Dynamics Group in association with the department of atmospheric physics, University of Oxford. The digital processing and display system demonstrates one of the many uses for the image display and processing system manufactured by Gresham Lion Ltd.

Europe on a clear day as seen by Meteosat, Europe's first weather satellite.

Scientific exploration spurs space advances



British Aerospace Dynamics Group are design authority for Britain's UK 6 satellite, due for launch in 1979.

British scientific exploration of space is the responsibility of the Science Research Council within its primary purpose of sustaining the standards of education and research in the universities. Research activities supported by the council's astronomy, space and radio board embrace spacecraft, sounding-rockets, high altitude balloons and ground-based installations.

About £27 million of the council's annual budget of £135 million is devoted to these purposes. Space science absorbs £8.5 million and another £8.5 million goes in contributions to the European Space Agency. The remainder is devoted to ground-based astronomy.

The council's own programmes and others in which it is involved include some of the most advanced technology available. British industrial companies participate in these programmes by providing some of the hardware; rocket vehicles, spacecraft and ground equipment. Industry also collaborates with a number of universities in preparing the experiment equipment flown in satellites and rockets.

Ariel 5, the UK's fifth scientific satellite, has been notably successful. Launched in 1974 it is in its fifth year of operation. Ariel 5 was designed and constructed by Marconi Space and Defence Systems Ltd as prime contractor.

Many significant new results in the rapidly developing field of X-ray astronomy have been produced by Ariel 5. Further X-ray astronomy experiments and a cosmic ray experiment are to be carried aloft in a further entirely British satellite, UK 6. Marconi Space and Defence Systems, Portsmouth, is the prime contractor for the space craft with British Aerospace Dynamics Group at Filton as sub-contractor for the satellite structure. The planned launch date for UK 6 is the second quarter of 1979.

The European Space Agency's scientific programmes provide useful opportunities for university groups sponsored by the council to participate in major space missions. Europe is participating in Nasa's space telescope mission, and is providing the faint-object camera and the solar array. British Aerospace Dynamics Group is the prime contractor for the solar and the advanced proton detector assembly. Other scientific projects under development for ESA are the 'Out of the ecliptic' and Exosat satellites.

UK industry and university groups have been prominently involved in ESA's very successful programme of scientific satellites starting from Esro 1 in 1968 through to the recently launched Geos. The council's Appleton Laboratory, University College, London, and Marconi Space and Defence Systems developed the sophisticated camera systems for the joint Nasa/ESA/Science Research Council international ultra-violet explorer. This is controlled for eight hours each day from ESA's ground station at Villafranca, Spain, where visiting astronomers are obtaining exciting new results in ultra-violet astronomy.

Large and small rockets have provided a relatively economic way of placing scientific equipment into the outer reaches of the earth's atmosphere. British Aerospace Dynamics Group's successful Skylark sounding rocket has been used for a great diversity of experiments in geophysics, atmospheric and astronomy studies since it was first introduced in 1957. Some 10 launchings per year of small sounding rockets for geophysical research into the upper atmosphere is underway. These utilise Petrel and Fulmar rockets supplied by Bristol Aerojet Ltd.

Skylark 12 sounding rockets, supplied by British Aerospace Dynamics Group, have been flown successfully in co-ordinated British/German scientific programmes.

Ground station, at Villa franca near Madrid, for the international ultraviolet explorer satellite. Plessey Radar Ltd supplied telecommunications hardware and software.

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* Audit Bureau of Circulation certified average circulation for 1977: 13 541 copies. The 1978 NBRC Businessman Readership Survey gives estimated readership of 33 000.

Trade and Industry: the decision makers' magazine.

New publications

Growth industry

Consumer legislation has been rapidly increasing over the past few years, a growth which is reflected in the variety of guides that are continually becoming available. They vary in approach from the brief guide for the layman, to the purely legal commentary. However, up till now no text book on consumer protection law has been published in the UK suitable not only for the informed layman but also for students studying this branch of law at university, for the legal profession and those working in local authorities who take the diplomas in consumer affairs and trading standards. The author of 'The law of consumer protection and fair trading', recently published, has written a guide intended for these varying needs.

The book is prefaced by an historical, economic and philosophical analysis of consumer protection laws, and goes on to discuss the institutional framework of consumer protection in all its variety of public and voluntary organisations. The author then looks at the consumer and the nationalised industries, before examining in the main part of the work the body of law which exists to protect the private consumer. Unsafe products, qualitative deficient goods and services, fraudulent trading practices, insufficient information, and economic exploitation through lack of competition or excessive prices, are all considered.

Throughout his book Mr Harvey refers to relevant books and articles, cases and statutes. He also appends a useful list of official publications based on that in the 1976 annual report of the Director General of Fair Trading. In all, a timely survey of a very large and still new subject, which is more readable than many legal texts.

The Law of Consumer Protection and Fair Trading, by Brian W. Harvey. Butterworths. 1978. xxvi, 327 pages; paperback £5.95. (ISBN 0 406 22190 1).

Exclusion clauses untangled

Exclusion clauses have for a long time been one of the bête noires of consumerists. Now David Yates brings the whole subject of exclusion clauses in contracts up to date with modern case law and legislation, in particular with the Unfair Contract Terms Act 1977. The law is as stated on 1 December 1977.

The author has two purposes. First, to produce a commentary on the law in a form suitable for students (and to suggest ways in which the law might be modified to meet current commercial and consumer needs). Secondly he has carried out research among the business and consumer communities and noted the apparent influence of the consumer interest on both the legislature and the judiciary; and the inadequacy of the law to provide a solution to the commercial problems of business. He has therefore attempted to fit this information into the context of a legal framework, believing that the lawyer should, in operating a system of rules, be aware of the problems of the community which the system is trying to serve.

In conclusion, the author underlines the trend since the Molony Report (Cmnd 1781, HMSO, 1962) to the promotion and protection of the consumer interest. In his summing up he says the following, which may underline what is required and what is so difficult to achieve in terms of actual law. 'Given the need for some consumer protection, and given the undesirability of allowing judicial review of one clause (the exclusion clause) only, it is suggested that the viable alternative is to permit review of the whole agreement. In other words, the courts should interpret the contract as a whole, including the exclusion clause . . . and may then interfere to protect the consumer interest . . .'.

Exclusion Clauses in Contracts, by David Yates. Sweet and Maxwell. 1978. xxi, 197 pages; hardback, £4.85, (ISBN 0 421 240380 X); paperback, £2.85, (ISBN 0 421 240407 1).

Law in context

The nature and enforcement of some consumer protection laws in Britain was the subject of Ross Cranston's D.Phil thesis (Oxford, 1976), an interest he now takes further with his substantial study 'Consumers and the law'. A comparative study of consumer law in Britain with developments in Australia, Canada and the United States, underlines the broad approach of this book, while setting British law against the social and economic background in which it has to operate is an aid to understanding.

The author believes that there are three approaches to consumer protection: voluntary self-regulation, private law, and public law. In the light of this concept his book is accordingly presented in three sections.

Business self-regulation, his part one, covers codes of practice, voluntary controls in advertising, and voluntary standards. He concludes that such techniques have an only limited effect. Then the more traditional approach, private law, brings us into the fields of contract and negligence. Cranston believes that private law works on the mistaken assumption that people know and will assert their legal rights. But there is still widespread ignorance of these rights although consumer advice centres and small claims procedures have helped. By and large, it is argued, private law is an inadequate tool of consumer protection.

Finally, public control, brings us into the orbit of government, and while government controls are not perfect, the author concludes they are the best protection for consumers. The legislation to enforce broad statutory standards are analysed, including the provision of information, product standards, control of trade practices and licensing.

This is a well laid out study, with helpful notes to each chapter and a reasonable index. One of the 'Law in context' series, and as the series title implies it provides a broader overview than the conventional legal commentary.

Consumers and the Law, by Ross Cranston. Weidenfeld and Nicolson. 1978. xxxvi, 514 pages; hardback, £15.00, (ISBN 0 297 77471 9); paperback, £7.95, (ISBN 0 297 77472 7).

Bibliography available

Readers interested in consumer matters may like to be reminded that an amended version of the second edition of the Office of Fair Trading's 'Consumer Bibliography', compiled by Susan Samuel and published earlier this year, is still available, price £1.00 (post free, cash with order). Copies are available from the Office of Fair Trading, Room 515, Chancery House, Chancery Lane, London WC2A 1SP.

A library for exporters

Trade and other economic statistics from almost every country in the world, including the UK, are available for reference in the Statistics and Market Intelligence Library at Export House, 50 Ludgate Hill, London EC4M 7HU, tel. 01-248 5757 ext. 368/369, telex 886143 (DTI Export LDN). A modern well-equipped library of over 100 000 volumes, it has a public reading room equipped with microfiche readers and photocopying facilities. Among the documents available are foreign trade directories covering some 170 countries and selected trade fair catalogues. The library is open from 09.00 to 17.30, Monday to Friday (last passes for the building are issued at 17.15).

Technology news

Strategy for plastics processing proposed

A recent study to investigate the performance and problems of plastics processing companies in South Wales has been carried out for the Department of Industry by the Rubber and Plastics Industry Training Board. It was considered that the plastics processing industry in South Wales was typical of the UK industry and lessons relevant to the national industry could be deduced. A report of the study, 'Towards a strategy for the plastics processing industry' was published, price £3, by the department on 21 August.

The report was made available for discussion and comment. It has been put before the National Economic Development Office plastics steering committee and the British Plastics Federation has been invited to circulate a summary of its findings to its membership. It deals with the image of plastics; technical development; marketing, export growth and import substitution; management; machinery and engineering; raw materials; education; coordination of advisory bodies and unification of the industry.

Principal recommendations of the report include:

☐ A processing industry advisory and consultancy service should be established, in and by the industry, on a national basis, for the specific purpose of supporting the processors in all aspects of their industrial activity.

☐ A centre of excellence in mould and die making technology should be established to complement the facilities currently available to the industry in respect of materials and processing technologies. Such a centre would bring together development, technology and training in all aspects of toolmaking germane to the plastics processing industry, including that of design.

☐ A third main recommendation, that the status of the Nedo plastics steering committee should be enhanced, has been satisfied by the establishment of the plastics processing industry sector working party under the government's Industrial Strategy.

Two further proposals have a direct bearing on training and on skill:

☐ Advantage should be taken of Manpower Services Commission training services division and resources to ameliorate the unemployment and redeployment situation. Particularly to support companies in the in-company training of toolmaking apprentices, technicians and designers.

☐ Local initiatives, bringing together management, trades unions, training boards and educational establishments should be jointly mounted to up-grade the level of mould and die-making skill.

The following extracts from the report enlarge upon a number of points of concern to the whole industry in the context of strategy formulation.

Image

There is a strong implication from the lower proportion of plastics materials being consumed by the plastics processing sector in the UK that manufactured plastics products, as such, have a wider acceptability in the west-German markets. Consequently, it is desirable for the acceptability of plastics products in the UK to improve so that the plastics processing sector is able to increase its own utilisation of the plastics materials directly consumed.

A widely held view is that any industry-orientated strategic plan must include proposals relating to the 'attitude' to plastics common in the UK. To begin to change attitudes, which is a long-term problem, implies a requirement for the industry to consider how it can begin to use its wealth of technology in the service of trade, as opposed to manufacture.

In this matter, some form of industry-centred promotional activity directed towards widening the use of plastics materials and components would be of advantage. The recent concern expressed by the Prime Minister for the building up of the components industries is germane to such considerations.

Technical development

Major development centres such as the Rubber and Plastics Research Association and the Fulmer Research Institute can continue to contribute to processing technologies, both at the frontiers of development and to the established procedures. But there is a need for the smaller companies to appreciate that they can themselves apply inventiveness at least at the level commonly seen in the small engineering company; and that the fullest spectrum of technical support is available to them outside their company either to solve problems or to develop product and process.

Marketing

The argument may be developed that an involvement with export markets leads to better appreciation of the opportunities in the home markets and that import substitution and exporting are elements of the same problem for the processing sector. That being so, and recognising the distribution of company sizes within the industry, attention must be drawn to the opportunities which could be developed for providing practical help to the small company which can be encouraged to export.

Management

A limiting factor is a lack of knowledge of the fundamentals of management awareness. It is common experience that only those companies with appropriate systems make best use of the wealth of the factual information which is available on all aspects of the industry. This is not the situation with the small companies, who need to be encouraged in this respect, but who require such information to be presented in a format reflecting their special needs.

Technical management

Technical management in the industry offers considerable scope for improvement, and the sector should be taking steps to absorb increasing numbers of technician grade employees, to enable itself to use effectively the complex capital plant which will increasingly reflect the industry and its technical status. In order to improve the industry's competitiveness and to bridge the gap between general and technical management, the proportion of polymer technologists and technicians can be expected to increase.

Injection moulding machinery

The plastics industry as a whole has naturally been concerned at the extent to which foreign-made machinery is imported into and used extensively in the UK. A survey was undertaken to study the factual situation and the subjective opinions on injection moulding machinery in the survey area. The report includes recommendations for action by the UK moulding machinery industry.

Regional management centres

Regional management centres will need to develop strategies and provide resources such as will enable managers and others in the smaller companies to learn when they recognise the need to learn. The traditional pattern of standard courses, held at predetermined times, is inadequate in such circumstances and the centres must see part of their future role as being the provision of in-company advice, and of help geared to the satisfying of a need when it occurs, through a system of 'learning centres'.

Both centre and teacher will need to develop a degree of flexibility beyond that normally associated with the educational establishment if they are to fulfil that role adequately. A 'learning centre' should be able to provide basic information on any aspect of managing required by the casual applicant, and this facility would include special coaching sessions for either individuals or for small groups.

Engineering syllabi

Universities and polytechnics should introduce an appreciation of polymers as part of all general engineering courses. In addition, a full-time option devoted to the application of polymeric materials should be available for third-year under-graduates and for post-graduates in faculties of engineering.

Apprenticeship

The plastics processing industry requires both engineering craftsmen and engineering technicians. The Manpower Services Commission document 'Training for skills: a programme for action' suggests that basic courses should be developed which would enable the trainee to enter a wide range of occupations.

Co-ordination of advice

Discussions with companies have identified deficiencies which detract from the most pro-

ductive use of the assets of many concerns. The project has, however, demonstrated that an effective project manager can be a direct help to companies in this respect. This illustrates what might be achieved, for the industry as a whole, if a form of processing industry advisory and consultancy service were to be deployed on a national scale.

Unification

The processing industry lacks any identifiable focus for its considerable economic potential. It would bring value to the development of an efficient manufacturing sector if means could be found for harmonising the objectives and policies of all its constituent elements.

Copies of the report can be obtained from Mr I. D. Andrews, Chemicals and Textiles Division, Department of Industry, Ashdown House, 123 Victoria Street, London SW1E 6RB, tel. 01-212 0642, and to whom comments should be addressed.

British R & D counters New York State's acid pollution problem

To study the gas distribution and the pressure drop likely to be experienced in equipment to remove sulphur from power station flue gases it was necessary to build a scale model of the plant. In looking for expertise in this field, Peabody Process Systems Inc of the United States turned to its sister company Peabody Holmes in Huddersfield and commissioned it to build a one-sixteenth scale aerodynamic model of the multi-stream absorption process.

Acid precipitation has virtually wiped out fish life in New York State's Adirondack mountain lakes, and forest growth in the area directly in the path of drifting sulphur-dioxide, has been seriously impaired. Because of this, millions of dollars are currently being spent on pollution-control equipment.

As part of this programme, Peabody Process Systems Inc, recently received a multi-million dollar contract for the supply of equipment to remove sulphur from power station flue gases. Operation of the process involves the washing of boiler flue gases with limestone slurry. Flow characteristics were extremely important and needed careful study.

A whole series of tests have been carried out in the complex perspex model which was built in the Peabody Holmes research and development department. The considerable amount of information which has been collected, will be used to confirm the design data for the four tower venturi absorber system. When in operation the plant will treat up to 1.3 million cubic metres per hour of gas from a 500 megawatt boiler at the Minnesota Power and Light Company's Clay Boswell coal burning power station.

The scrubbed gases passing out of each absorber will be saturated at 53°C. To prevent condensation problems in the ducts and the chimney the gases will be heated by the injection of a small flow of hot untreated flue gas. The duct work, downstream of the absorber, is protected by a corrosion resistant lining; the temperature of which must not exceed 80°C. Consequently, the mixing of the hot and the cold gas streams is very important to ensure that damage to the duct lining does not occur either by condensation or overheating.

The gas mixing system developed through exhaustive testing, enabled the above requirements to be met at minimum capital cost consistent with acceptable operating cost. Peabody Process Systems can thus confidently proceed with full scale construction.

SRC funds biotechnology advance at Umist

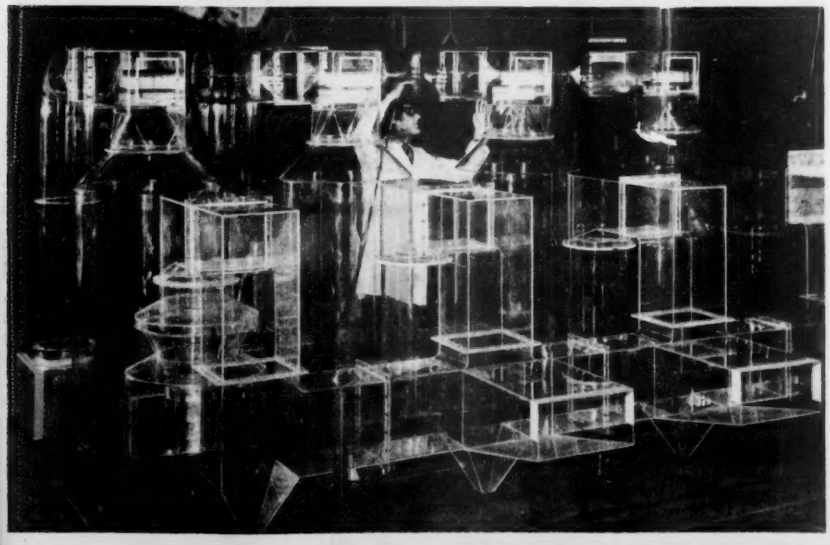
A University of Manchester Institute of Science and Technology (Umist) investigation into the properties and applications of a new type of particle which can contain and support the action of biological material in biochemical reactors is to be financed by a Science Research Council research grant of £129,330 over four years. Such reactors are used in such diverse fields as the fermentation of fine chemicals to produce antibiotics, and the reduction of pollution by the improved treatment of industrial wastes and sewage.

This is the second major award made by the council's chemical engineering and technology committee for support of a biochemical engineering research programme. It was made to Professor Bernard Atkinson and Geoffrey Black of Umist's department of chemical engineering.

Professor Atkinson has been successful in developing a novel biomass support particle analogous to catalyst support particles used extensively in industrial chemical reactors. The technique for making these particles is simple and enables, in principle, particles of any size and porosity to be made. The important features of the particles include high porosity, a very open structure and lattice material of small cross-section and random structure, with an ability to retain biomass when used in stirred tanks and fluidised beds. The wire balls are about the size of a pea and are like spiders' webs woven in three dimensions.

The research programme promises a major advance in biotechnology, leading to greatly improved design and operation of biological reactors. The work will be carried out in association with Simon-Hartley Ltd and ICI Ltd, agricultural division.

Peabody Holmes' 1:16 scale perspex testing model of the venturi sulphur dioxide scrubber system.



Hamworthy Engineering gets first quality assurance certificate

The first certificate to be awarded under Lloyd's Register's new quality assurance scheme for machinery and associated equipment for marine use has been given to the pump and compressor division of Hamworthy Engineering Ltd. Certificate QAM 001 confers approval to Hamworthy's centrifugal pumps, screw pumps, gear pumps and reciprocating air compressors and follows Lloyd's Register's approval of production methods, inspection and testing arrangements, quality control procedures and general standards of workmanship.

All the approved items will be suitable for fitting in ships or other installations classed with Lloyd's Register, subject to construction in accordance with the register's rules and satisfactory installation under the usual conditions of survey and testing.

Quality assurance scheme for machinery applies to individual and series produced items manufactured under closely controlled conditions. Under the scheme surveyors will carry out regular surveillance of the company's approved manufacturing and quality control procedures. The requirements are based on quality assurance techniques which, after approval by Lloyd's Register, have been adopted as an alternative to direct survey methods.

Very high standards will be encouraged and only those manufacturers who employ first class and comprehensive quality control methods will be approved. After experience has been gained, it is intended to include these requirements in the rules and regulations for the classification of steel ships. The scheme is intended to cover machinery and associated components for marine use which require Lloyd's Register certification.

New products

DOI primes industrial robot activities

A pump priming grant of £15,000 over a two-year period has been made by the Department of Industry to the British Robot Association. Formed this year, it is devoted exclusively to broadening the knowledge of production engineers, management and unions in manufacturing industry about the use of industrial robots, as well as to promoting education in these techniques. The association will become the centre for all industrial robot activities in the UK. Furthermore, it will provide the means for information exchange between governmental departments, industry, universities and trade unions, as well as formulating policies that will lead to the wider acceptance of this form of automation by industry.

Through regular meetings in the UK, overseas study tours, newsletters and special reports, the association will provide its members with a unique opportunity to meet people with similar problems and to learn from those who have actually installed industrial robot systems. By taking advantage of such opportunities to meet, learn and gain from other people's experience, the association feels, it will be possible to avoid many of the pitfalls arising from installing industrial robot systems.

The next two seminars on 'Getting the most out of industrial robots' will be held in Birmingham on 12 October and 23 November. Each seminar will consider three case studies in depth. Application areas to be discussed will include paint spraying, welding, assembly, machine loading/unloading, fabrication and grinding.

In co-operation with the Japan Industrial Robot Association, the British association has arranged a unique two-week study tour to Japan. This will take place between 27 May and 10 June 1979. It will be restricted to 25 participants to allow maximum time for discussion with the Japanese companies. The approximate costs will be £1,350, which includes schedule airline travel to and from Japan, single room accommodation in first class hotels throughout and all ground transfers in Japan. An optional third week visiting Taiwan, Hong Kong and India will also be available.

For further information about the seminars and Japan tour or membership of the association please contact Executive Director, British Robot Association, 39 High Street, Kempston, Bedford, tel. Bedford 853605.

Finance for technology

The National Research Development Corporation provides financial and other support for technological developments of potential commercial importance. NRDC promotes the adoption by industry of new products and processes invented in government laboratories, universities and elsewhere. Further details are available from the National Research Development Corporation, Kingsgate House, 66-74 Victoria Street, London SW1.

DRO with Memofix available for Bridgeports

A new digital read-out system is now being offered by the Adcock-Shipley Division of Textron Ltd with their Bridgeport milling, drilling and boring machine, or as a complete package for 'retrofit' to existing Bridgeports. A new feature called Memofix provides a fixed reference point to enable easy and reliable re-establishing of a workpiece reference datum. This is particularly advantageous in the case of operational interruptions or power failure, and can also be used as a simple functional check of the complete digital read-out system.

The two axis system operates on the principle of photo-electric scanning of a glass grating which provides the basis for high accuracy. A strong die-casting houses the bi-directional counter unit and the smooth waterproof front face incorporates a non-glare filter over the displays. Preset is rapidly achieved via the keyboard input and other standard features include metric/inch switching, main on/off switch and voltage regulator. Displacements are indicated in 0.01 mm units (six decades) or 0.0005 inch units (seven decades).

The transducers, individually factory tested and calibrated on a computerised measuring machine, are of slimline design, enabling the 'x' axis unit to be mounted at the rear of the Bridgeport table in a position less vunerable to damage. A further special feature is the reed-type distortion free clamps which are fitted to the Bridgeport when the digital read-out system is specified, thus reducing the slide distortions associated with normal machine slide

Further information: circle 141

Time saved in printed circuit design

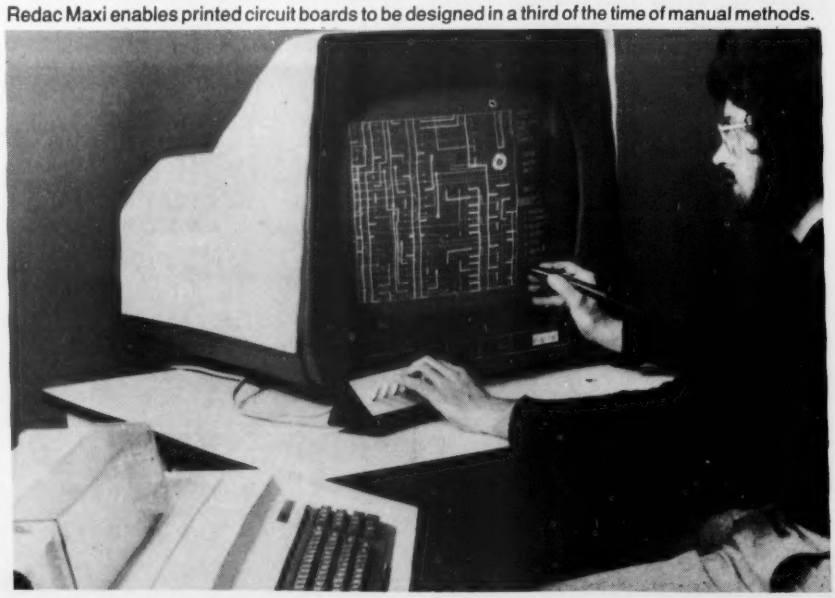
A printed circuit-board design system from Racal-Redac Ltd enables a board containing 100 dual-in-line integrated circuits and a large proportion of discrete components to be designed in a third of the time and at half the cost of manual techniques, according to its manufacturers. Capable of handling between 100 and 150 integrated circuits on one board measuring up to 585 mm by 635 mm, the Redac Maxi printed circuit board designer offers eight track widths with 32 pad sizes and up to eight tracking layers.

The system incorporates a high performance 535 mm refreshed graphics terminal and a flicker-free display. A standard facility is on-line plotting which reduces overall development time and enables photoplotting of a complete design to be carried out while another board is being displayed.

Powerful automatic routines for component placement, track routing and automatic design rule checking are possible through an auto-interactive technique. Components or routes may be added, deleted or modified at any time during or after the design process. Options available include an interactive schematic drawing facility which typically will produce a drawing for a 100 integrated circuit board in 16 hours.

Further information: circle 142

Redac Maxi enables printed circuit boards to be designed in a third of the time of manual methods.



Freepost reader service

For further information on items in this section, circle the corresponding number on the reader services page near the end of the magazine.

Hylogrip locks up metal-to-metal joints

An entirely new, patented, low cost compound for sealing and locking metal-to-metal joints, including threads of set screws, nuts and bolts, and studs and castings, has been introduced by Marston Lubricants Ltd. Available in three grades to give high, medium or low viscosity and three torque breaking strengths, Hylogrip is the first of its kind to cover all the requirements of a locking and retaining compound, so simplifying the selection problems of engineers.

With application in the automotive, marine and domestic appliance manufacturing industries and in general engineering, primarily on threaded components, Hylogrip can also be used for metal-to-metal cylindrical components or face-to-face joints where it is required to retain the joint without movement. Effective with iron, steel and brass, Hylogrip locks and seals metal faces together by means of a monomeric or low polymeric material which polymerises in the absence of air using the metal as a catalyst.

Viscosity grades vary according to the retaining strength required and are identified by colour – low viscosity is orange, medium viscosity blue and high viscosity Hylogrip, green. Curing time varies according to viscosity – low viscosity has an average cure time of 10 minutes, medium of 15 minutes and high of 15 to 20 minutes.

Further information: circle 143

Plastics fabrications have high chemical resistance

Two small plastics fabrications supplied recently by Varicol Ltd represent an important step forward in the field of industrial materials. These items – a small tank and a dipping basket – are believed to be Britain's first fabrications in polyvinylidene fluoride (pvdf) sheet.

The material's main charecteristics already proved in the form of mouldings and extrusions, are high temperature performance, withstanding up to 140°C continuous working, and outstanding chemical resistance. Pvdf will for instance handle trichlorethylene at boiling point.

Varicol have supplied small tanks for containing a 96 per cent concentration of sulphuric acid at temperatures up to 32°C, used in the manufacture of multi-layer printed circuit boards. Few other engineering construction materials, metals or plastics, will withstand these arduous conditions, but user and fabricator predict a long working life for the little pvdf vessel. The thickness of sheet used was 6 mm.

In another instance a pvdf dipping basket has been supplied for finishing fastenings, fittings, washers and various turned parts. They are first degreased in hot trichlorethylene and then immersed in strong hydrochloric acid as part of the plating process.

As well as the properties mentioned above, pvdf has outstanding resistance to ageing, excellent thermal stability and abrasion resistance, good fire resistance and is non-toxic. In spite of its present high cost and a specific gravity of 1.78, the material's performance in stringent conditions of heat and chemical attack will assure its future in the field of specialist fabrications.

Further information: circle 144

Roof tiles produced on site

A mobile plant for producing concrete roof tiles has been developed by Redland Roof Tiles Ltd for those who find availability of building materials on site more important than centralised high-volume production. All the plant can be transported on six 20-tonne lorries and no single piece of equipment is longer than 6 m. Site requirements are merely a simple canopy, a concrete apron, water, and fuel oil for the concrete-curing system. Electricity can be provided by a skid-mounted generator.

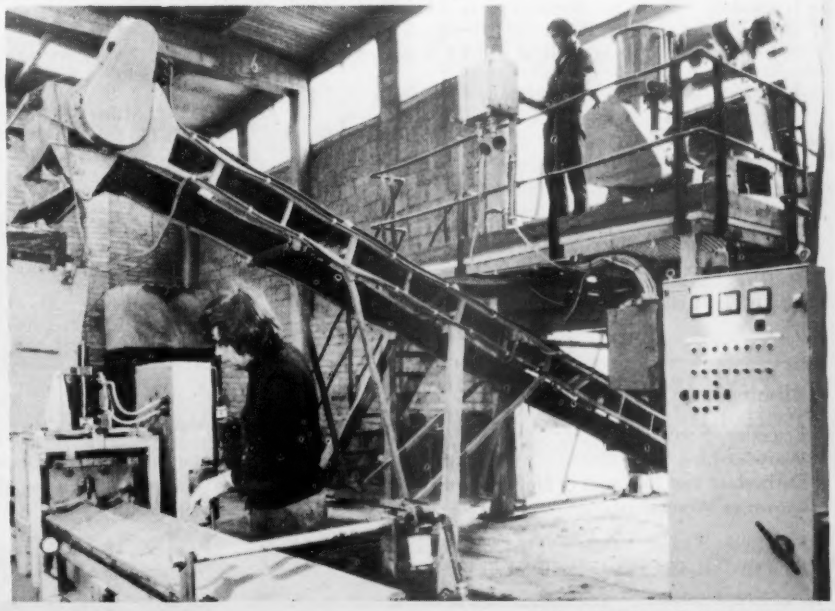
Production is based on a net output of 5000 tiles per eight-hour day. Though designed for relatively labour-intensive operation, the plant can be successfully manned by only nine people. Production can be doubled by adding another curing chamber and the appropriate operators.

The basic plant produces smooth-surfaced, plain or through-coloured interlocking concrete roof tiles; it is robust and easy to maintain. The equipment consists of a sand screening plant, mixer section, tile making machine, curing chamber and tile removal conveyors, two curing chambers with process heating system, electrical control equipment and cabling, and semi-automatic hand fittings bench with mould box and manually operated ejector/linkage.

Also included are 5500 diecast aluminium main tile pallets and 250 diecast aluminium ridge tile pallets, plus four stacking barrows. Sufficient spares are supplied to manufacture 750 000 tiles.

Further information: circle 146

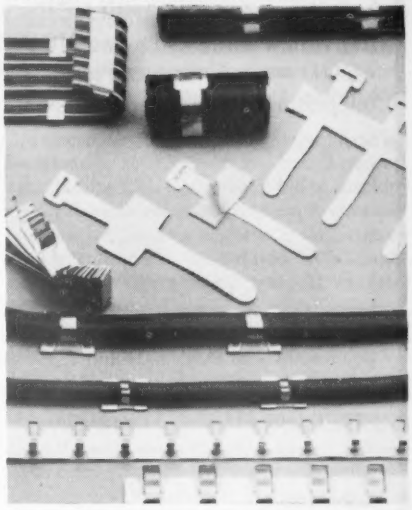
On-site plant has a net output of 5000 tiles per eight-hour day.



Adhesive-backed clips ease cable fixing

Adhesive-backed cable clips that are quick and easy to apply have been developed by Brandauer and Co Ltd for fixing various sizes of round or flat-ribbon cable up to a maximum diameter of 75 mm. Produced from aluminium and backed by an adhesive pad, the clips are said to be less expensive than their usual all-plastics equivalent. In use, the backing paper is simply removed from the clip's polythene backing and the fixture is firmly stuck into the required place. The clip's aluminium arms are then squeezed around the cable to hold it secure.

Further information: circle 145.



Addresses of ECGD offices

The Export Credits Guarantee Department (ECGD) is a government department providing export credit insurance for United Kingdom exporters and insurance against political risks for new investments overseas. Although credit insurance is its main service to exporters the department offers them a number of others. Firstly the bank guarantee scheme, enables exporters who are eligible to obtain export finance from their bank at a special low rate. Major projects carried out by British firms in overseas countries can be financed by the buyer credit technique which gives the exporter the bulk of his payment on shipment of the goods. Similar to this is the line of credit facility which extends the buyer credit principle to include contracts often with an individual value as low as £10,000. ECGD now insures 35 per cent of all UK exports. For full details of all ECGD services contact Publicity Branch, ECGD, Aldermanbury House, Aldermanbury, London EC2P 2EL, telephone 01-606 6699 extension 258, telex 883601, or get in touch with one of the offices listed below.

Central London

London, EC1 to EC4, WC1 and 2, W1 and SW1.

B. M. Sidwell, Waverley House, 7–12 Noel Street, London W1V 3PB. Tel. 01-437 2292. Telex 24105.

South London

London SE, SW2–20 and W2–14, Kent, Surrey (excluding the administrative district of Spelthorne), East and West Sussex, Hampshire, the Isle of Wight and the Channel Isles.

J. M. Foster, 320 Purley Way, Croydon, Surrey CR9 4HL. Tel. 01-686 9921. Telex 946998.

North London

London N, NW, E, the southern parts of Essex, Hertfordshire and Buckinghamshire, the Slough, Burnham and Datchet area of Berkshire and the Spelthorne district of Surrey.

J. K. Sedman, 593–599 High Road, Tottenham, N17 6SW. Tel. 01-808 4570. Telex 263615.

Belfast

The six counties of Northern Ireland.

R. H. Forsyth, River House, High Street, Belfast BT1 2BE. Tel. 0232 31743. Telex 74577.

Birmingham

Leicester, Nottinghamshire, Salop, Staffordshire, Warwickshire, West Midlands, the southern part of Derbyshire and that part of Hereford and Worcester formerly known as Worcestershire.

F. Wilmot, Colmore Centre, 115 Colmore Row, Birmingham B3 3SB. Tel. 021-233 1771. Telex 33132

Bristol

Dyfed, Powys, Gwent, West, Mid and South Glamorgan, Gloucester, Avon, Wiltshire, Oxon, Dorset, Somerset, Devon and Cornwall. That part of Hereford and Worcester formerly known as Herefordshire, Berkshire except the Slough, Burnham and Datchet areas.

R. A. Bounds, 1 Redcliffe Street, Bristol BS1 6NP. Tel. 0272 299971. Telex 44248.

Cambridge

Bedfordshire, Cambridge, Norfolk, Northamptonshire and Suffolk, the northern parts of Essex, Hertfordshire and Buckinghamshire, and the southern part of Lincolnshire including the City of Lincoln.

H. Watson, Three Crowns House, 72–80 Hills Road, Cambridge CB2 1NJ. Tel. 0223 68801. Telex 81624.

Glasgow

Scotland and the Outer Isles.

D. W. Miller, Fleming House, 134 Renfrew Street, Glasgow G3 6TI. Tel. 041-332 8707. Telex 77130.

Leeds

Durham, Tyne & Wear, Northumberland, Cleveland, North, West and South Yorkshire, Humberside and the northern part of Lincolnshire.

W. Ford, West Riding House, 67 Albion Street, Leeds LS1 5AA. Tel. 0532 450631. Telex 55125.

Manchester

Gwynedd, Clwyd, Cheshire, Merseyside, Greater Manchester, Lancashire, Cumbria, the northern part of Derbyshire and Isle of Man.

R. H. K. Hughes, Elisabeth House, St. Peter's Square, Manchester M2 4AJ. Tel. 061-228 3621. Telex 667756.

Overseas trade news

Botb sponsors 1500 firms at German trade shows

Over 350 firms, the largest number of participants in any British Overseas Trade Board joint venture during 1978, will be at the Frankfurt international book fair from 18 to 23 October. With a further 400 publishing firms exhibiting independently, Britain will easily have the largest foreign contingent at the fair.

The 350 are among 1500 UK firms that will be exhibiting at 26 trade fairs in West Germany in the September to November quarter. At another Frankfurt show – the fortieth international textile for clothing exhibition (Interstoff) from 21 to 24 November – Britain will again be the largest foreign country with a joint-venture group of 107 companies backed by the BOTB in collaboration with the National Wool Textile Export Corporation.

At the international exhibition of automobile, workshop and garage equipment (Automechanika), also held in Frankfurt from 23 to 27 September, 44 British companies will be in a joint-venture group organised in co-operation with the Society of Motor Manufacturers and Traders. Products on display will range from key fobs and easy-fit mudflaps to diesel pump test machinery and suspension test equipment.

In Cologne, over 200 British companies will exhibit at two concurrent shows both being held from 1 to 3 October. The largest British presence – 168 companies – will be at the twentieth international trade fair of sports goods, camping equipment and garden furniture (Spoga). An extensive range of British equipment and products for use in sporting and outdoor activities as well as garden furniture will be shown. The other event will be the international garden trade fair, with 47 British companies taking part. Their exhibits will range from bean frames, seed dispensers and hand tools to cultivators, green-houses and wooden garden sheds. This group is sponsored by Gardenex.

At the world fair of photography 'Photokina 78', also in Cologne from 15 to 21 September, BOTB will support 67 companies in co-operation with the British Photographic Export Group. The British display will feature equipment for both the amateur and professional photographer.

At the international boat show, Emtec, in Hamburg from 19 to 29 October there will be another large joint venture – 70 firms – sponsored by the Ship and Boat Builders National Federation. Boats, chandlery and marine equipment will be on display.

Malaysian railways order diesel shunters

Malaysian railways officials visit the Loughborough factory of Brush Electrical Machines. In the UK from 10 to 20 July as guests of the British Overseas Trade Board, the team, signed a £1.7 million contract for 10 diesel shunting locomotives. Pictured are Ishak bin Tadin (centre) with Mr G. Calder (right) Brush's traction director and Mr R. Hampson (left) production director.

UK industry gains £11m from June aid

British industry received over £11 million in June from orders arising from aid grants and loans made to the developing countries by the Ministry of Overseas Development and administered by the Crown Agents.

The following were among the largest contracts for goods accepted for financing in June, including earlier contracts accepted for reimbursement from aid funds:

Telecommunications testing equipment for Bangladesh (£23,788) from Pye Telecommunications Ltd, Cambridge; filling machinery for Bangladesh (£26,467) from Reckitt and Colman Ltd, Hull; transformers for Ecuador (£78,909) from Hawker Siddeley Ltd, Loughborough; bridging equipment for Guyana (£461,679) from Thomas Storey (Engineers) Ltd, London; fire protection equipment for India (£84,800) from Walter Kidde and Co Ltd, Northolt, Middlesex; agricultural forks for Jamaica (£24,000) from Bulldog Tools, Wigan; locomotive spares for Kenya (£84,914) from Ruston Diesels Ltd, Newton-le-Willows, Merseyside; grain drying equipment for Lesotho (£54,559) from E. H. Bentall and Co, Maldon, Essex; agricultural tractors for Sri Lanka (£286,700) from Ford Motor Co Ltd, Basildon, Essex; flat-bottomed rails for Tanzania (£2,060,595) from British Steel Corporation, Workington, Cumbria.

UK help for phosphate mining in Pakistan

Consultants from Powell Duffryn and the National Coal Board are to explore phosphate deposits in the Hazara region in the north-west frontier province of Pakistan with the help of a £1.6 million grant from UK and funds.

This new assistance will follow up an earlier survey carried out by the same consultants in Hazara which suggested the existence of enough phosphate deposits to supply the phosphoric acid plant of a proposed new fertiliser production complex to be built in the region. The new study – to run for two and a half years – is intended to prove the adequacy of such deposits

Birmingham chamber sponsorship at Canadian hardware show

Birmingham Chamber of Industry and Commerce is once again sponsoring British participation on a joint venture basis at the Canadian

hardware show which is taking place in Toronto from 11 to 14 February 1979.

The joint venture, which will consist of separate groups in each section, is supported by the British Overseas Trade Board, enabling companies to take part economically and relieved of much of the administrative detail.

The show, sub-titled 'Canada's home center showplace' is in its seventy-fourth year and over this period has established its well-known reputation for good business and attendance. Having increased in size by 25 per cent over the last event, the format will be changed in 1979 by arranging the layout in four sections: hardware and tools; housewares and giftwares; sporting goods and outdoor living products; building materials and home improvement products.

Each of these headings embrace many individual products and services and the show will be aimed at wholesale and retail buyers, builders merchants, hardware and ironmongery stores, architects and home centre operators.

Further information concerning suitable product lines, costs, financial assistance, etc, is available from Tony Cox, Birmingham Chamber of Industry and Commerce, 49 Calthorpe Road, Birmingham B15 1TH, tel. 021-455 9600.

Hints to business men booklets

Revised editions of the booklets on Barbados, Grenada, the West Indies Associated States, Montserrat, Guadeloupe, Martinique, St Martin, St Maarten and the British Virgin Islands, El Salvador, Sweden, and Syrian Arab Republic.

British exporters can order these booklets by post, accompanied by the appropriate remittance, from the Department of Trade, Publications Sales Unit, Export House, 50 Ludgate Hill, London EC4M 7HU at £1 per copy, plus postage and packing as follows: 1 copy 20p; 2 to 4 copies 30p; 5 to 7 copies 40p; more than 7 post free.

Copies may also be purchased by personal callers at Export House and at the offices of the Department of Industry at Newcastle upon Tyne, Cockermouth, Manchester, Leeds, Nottingham, Birmingham, Bristol; from the Scottish and Welsh Offices, and from the Department of Commerce, Belfast.

Foster Wheeler gets £6m contract for Indian fertilizer plant

Foster Wheeler is to provide contractors' services for a 140 million urea fertiliser plant to be built at Kakinada in eastern India, following signing of contracts worth about £6 million in Reading on 15 August. The contract is being funded from Britain's aid programme to India.

Under the contract – with Nagarjuna Fertilizer and Chemicals Ltd – Foster Wheeler will provide design and engineering services and be in charge of purchasing much of the necessary equipment for the plant at Kakinada on the coast of Andhra Pradesh. As overall contractors the company will also be responsible for commissioning the plant for which British aid is being used to finance both the supply of services and equipment from Britain.

The Kakinada plant will help India to achieve its objective of self-sufficiency in nitrogen fertilizer production.

Coffee mugs and jewellery win ACE export awards

A Scottish-based company manufacturing coffee mugs and a London jewellery company are the winners of the 1977-78 ACE awards for commendable effort in exporting. The companies, Dunoon Ceramics, and Jane Allen (Jewellery) Ltd received their awards on 14 August at the international gifts fair at Olympia.

Applications for the 1977-78 awards were assessed by an independent panel under the chairmanship of Arthur Day, director general of the Institute of Export, under whose auspices the scheme is operated. The panel said that Dunoon Ceramics had achieved impressive increases in export sales every year since the company was formed in November 1974, and had maintained an active export sales policy, consolidating efforts to sustain and increase sales in existing markets, developing newer outlets such as Australia and establishing new markets.

Of Jane Allen (Jewellery), the panel said that it had achieved a remarkable increase in export sales of 438 per cent, mainly by exporting substantially more to the Middle East and Japan where the company had started business the previous year. The company had continued to research and develop new markets such as France, Germany, Austria, Lebanon and north America.

Four highly commended certificates were also awarded, to Arnold Designs of Stroud, Hunkydory Designs of Cookham, Lady Clare of Lutterworth and Maddison and Co of Leatherhead.

Amendment to NTI 1694

In the annex, the tariff heading for the entry 'Men's and boys' outer garments' should read '61.01', not '60.01'.

Notices to importers

Issued by the Department of Trade, Import Licensing Branch, Charles House. 375 Kensington High Street, London W14 8QH. Telephone inquiries should be addressed to the number at the end of the notice

1702: Imports of bananas from the dollar area

To offset expected shortfalls in supplies of fresh bananas to the UK from other sources, a further supplementary quota of 8000 tonnes has been established for imports from the dollar area.

In order to ensure continuity of imports, the supplementary quota will be allocated between existing licence holders, having regard to the use they made of their allocations under the quotas for 1976–77.

Import licences will be issued to importers against their allocations only for those amounts for which they can produce evidence of a firm contract with the overseas supplier.

Licences issued under these arrangements will be valid until 30 September 1978.

Inquiries: Import Licensing Branch, 01-603 4644 ext. 361.

1703: Imports of trousers from Singapore

The EEC has negotiated with Singapore a restriction on imports into the UK of certain knitted or crocheted trousers falling within tariff heading 60.05 and originating in Singapore.

Pending enactment of community legislation, the provisions of the arrangement are being operated de facto as set out below. The goods affected and the quota established for goods exported from Singapore in 1978 are as follows:

Category/Tariff heading/Description	Quantity
28/ex 60.05 Knitted or crocheted trousers, of cotton, of man-made textile fibres, of wool or of fine animal hair, *other than those of textile fabrics, impregnated, or covered or coated on one side, with artificial plastic material, and other than shorts and babies' trousers*	300 000 pieces

Imports of these goods from Singapore were already subject to UK surveillance licensing. Current surveillance licences issued under those arrangements were revoked with effect from 1 September.

Licensing arrangements

The Singapore authorities will administer the quota by issuing to their exporters export certificates endorsed to the effect that the consignments have been debited against the agreed ceiling for exports to the UK. These certificates should be submitted by UK importers, in support of a completed form ILB/A, to Import Licensing Branch, which will issue import licences up the quota limit.

Goods in transit

The Singapore authorities will issue duly endorsed export certificates for these newly restricted goods for consignments exported from Singapore on or after 1 September 1978. Goods in transit to the UK on or before 31 August will be licensed without the requirement for an export certificate to be produced, provided that satisfactory evidence (ie bill of lading or airway bill) of the date of shipment of the goods is supplied to Import Licensing Branch in support of a completed from ILB/A; applications in respect of such goods should be sent to reach Import Licensing Branch not later than 22 September 1978.

Inquiries: Import Licensing Branch, tel. 01-603 4644 ext. 367.

CRE: Commercial Relations and Exports Division

The Commercial Relations and Exports Divisions are responsible for the protection of United Kingdom commercial interests in the negotiation and administration of commercial treaties and trade agreements within the framework of the EEC's common commercial policy. There are five divisions. CRE1 is concerned with multilateral trade questions. The other four divisions concentrate mainly on bilateral arrangements.

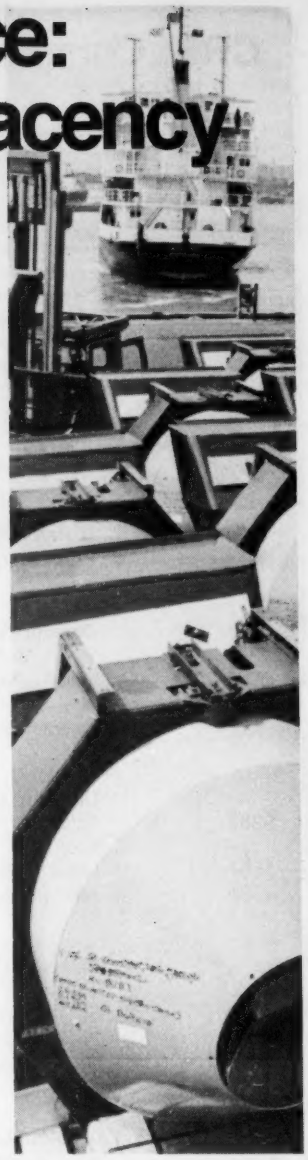
The Export Services and Promotions Division, under the direction of the British Overseas Trade Board, is responsible for providing advice, information and assistance to British businessmen engaged in overseas trading. It works closely with the CRE Territorial Divisions, with Export Sections of the Regional Offices and with Commercial Departments of overseas posts. All inquiries, Tel. 01-248 5757.

Where necessary BOTB export service officers refer firms to the territorial division (CRE2,3,4,5,) who provide help and advice when a firm's overseas business is being affected or is likely to be affected by another country's commercial law or regulations or by trade restrictions. Countries/regional groupings covered by each branch together with telephone inquiry points are set out below.

All extensions can be dialled direct. Callers should dial (except where stated) **01-215** followed by the extension given.

Extension	
	Division 2 branch 1
3364	North America, Bermuda, US Pacific Islands, St Pierre, Miquelon, Langlade Islands.
	Division 3 branch 1
5342	Spain, Malta, Andorra, Gibraltar, Canary Islands, Portugal, Cyprus, Greece, Turkey, Yugoslavia.
5298	Iceland, Norway, Sweden, Finland, Austria, Switzerland.
5336	Italy, San Marino, West Germany, France, Monaco, Denmark, Republic of Ireland, Netherlands, Belgium, Luxembourg
	Division 3 branch 2
5283	Ecuador, Venezuela, Bolivia, Chile, Colombia, Peru, Brazil, Argentina, Paraguay, Uruguay, Falkland Islands, Antarctic.
5567	Costa Rica, Dominican Republic, El Salvador, Honduras, Mexico, Nicaragua, Panama, Caribbean.
5330	Australasia, Pacific Islands.
	Division 4 branch 1
3422	Hungary.
5735	Czechoslovakia, German Democratic Republic, Romania.
5264	USSR, Mongolia.
5256	Poland, Bulgaria, Albania.
	Division 4 branch 2
5279	India, Pakistan, Nepal, Sri Lanka, Maldive Islands, Bangladesh.
5747	Indonesia, Philippines, Thailand, Malaysia, Singapore, Brunei.
5273	Republic of Korea (South), Hong Kong, Macao.
4322	Burma, Kampuchea (Cambodia), Laos, North Korea, Vietnam, China.
5243	Taiwan.
01-248 5757 ext 7162 or 613	Japan.
	Division 5 branch 1
3419	Saudi Arabia, Kuwait, Bahrain, Qatar, United Arab Emirates, Oman, Yemen Arab Republic, Peoples Democratic Republic of Yemen.
5218	Iran, Iraq.
	Division 5 branch 2
5220	Israel, Lebanon, Syria, Jordan, Afghanistan.
5225	Sudan, Egypt, Libya, Tunisia, Algeria, Morocco.
	Division 5 branch 3
5276	South Africa, South-west Africa/Namibia, Botswana, Lesotho, Swaziland, Rhodesia.
3064	Nigeria, Ghana, Sierra Leone, The Gambia, Liberia.
3331	Ascension, British Indian Ocean Territories, Ethiopia, Jibuti, Kenya, Malawi, Mauritius, St Helena, Seychelles, Somalia, Tanzania, Tristan da Cunha, Uganda, Zambia.
3435	Angola, Benin, Burundi, Cameroon, Central African Empire, Cape Verde Islands, Chad, Comoro Island, Congo (Brazzaville), Equatorial Guinea, Gabon, Guinea, Guinea-Bissau, Ivory Coast, Madagascar, Mali, Mauritania, Mayotte, Mozambique, Niger, Reunion, Rwanda, Sao Tome and Principe, Senegal, Togo, Upper Volta, Zaire.

Export performance: no room for complacency

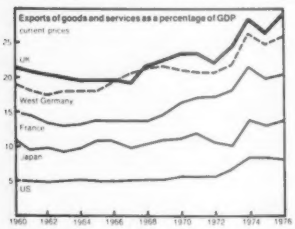


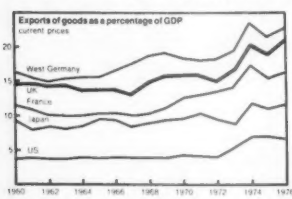
This survey is based on a recent Department of Trade study of UK export performance over the past two decades in relation to economic activity generally, and considers the impact of a number of factors (eg price competitiveness, productivity) which might be thought important in export performance. It also examines the changes which have taken place in the pattern of UK exports, both by area and product, drawing on both statistical analysis and the wealth of other evidence available to the Department of Trade through its extensive contacts with exporters, and compares Britain's experience, where possible, with developments in the United States, France, West Germany and Japan.

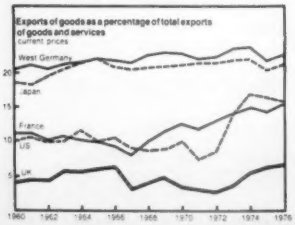
When Edmund Dell, Secretary of State for Trade, drew on this survey for his recent address to the conference on the total export concept, he concluded: 'If from this survey I had to select one single positive fact it is the greater dependence on the more open markets of Europe. It is in Europe above all that we must show the capacity to compete. If we can compete in Europe it will make easier export success in other parts of the market. There is reason for comfort therefore in the fact that a greater proportion of our exports are going to Europe. There is reason for comfort also in the recent stabilisation of our share of export trade in manufactures. Comfort, but hardly complacency.'

Just how important are exports in the UK economy compared with other major industrialised countries, such as Germany, France, USA or Japan? In 1976, with a gdp of £122 billion at market prices, UK exports of goods and services were £35 billion (£25 billion goods plus £10 billion services) or 29 per cent of gdp. This shows, on the basis of the available international data, that the UK economy is more dependent on exports of goods and services than that of Germany (26 per cent of gdp in 1976) or agriculturally rich France (20 per cent), more than three times as dependent as the large and therefore self-sufficient United States (8½ per cent) and, surprisingly, more than twice as dependent as relatively small, heavily populated, Japan (14 per cent). Industrialised countries with smaller economies, such as the Netherlands or Belgium, are of course more highly trade dependent than the UK.

In all these countries the importance of trade in both goods and services as a proportion of gdp has grown steadily in recent years, reflecting reductions in trade barriers and increased international specialisation/division of labour. Since 1960 the rate of growth of trade in goods and services as a proportion of gdp has been broadly similar in the UK, Germany, Japan and France; the United States shows a somewhat faster overall growth which has mainly occurred in the past few years.







Exports of goods form a high proportion of total exports of goods and services in these five countries. In 1976, the figures were about 70 per cent in the UK, about 80 per cent in France and the United States, and around 85 per cent in Japan and Germany. For all these countries goods have taken a generally rising proportion of total exports of goods and services in the period 1960-1976, although the UK increase is, if anything, smaller than that of the other countries. The pattern of the changes in the share of exports of goods in gdp in the period 1960-1976 follows broadly that for exports of goods and services.

Conversely the importance of services within the total of exports of goods and services is highest for the UK, followed by France, the United States, then Japan and Germany. Exports of services as a proportion of gdp have shown underlying growth in all five countries over this period, but have grown rather more slowly than exports of goods as a proportion of gdp.

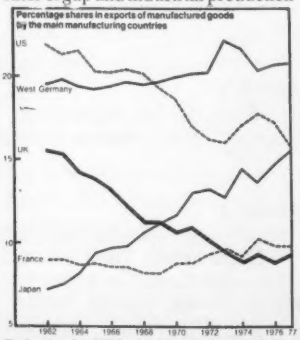
There are considerable difficulties in making international comparisons of invisible receipts. However, it would appear that the UK share of world receipts of services and interest profits and dividends declined during the 1970s and stood at about 9 per cent in 1976, but was still about second (with Germany) to the United States, whose share has also declined. Japan's share increased over the same period, but from a comparatively low level.

Since 1968 trade in goods has tended to be in deficit in the UK, in surplus in Germany and Japan, narrowly in surplus in France until the oil price rise of 1973 and erratic in the United States. On invisibles (services, interest, profit and dividends, and transfers), the UK tends to be in constant surplus while Germany, Japan and, to a lesser extent, France have all tended to have substantial deficits.

Figures for the value and volume of total exports for the five countries under study show that growth of UK exports has tended to be slower than the others. Within total exports of manufactures form between 80 and 85 per cent of British exports of goods, or just under 60 per cent of our total exports of goods and services. Performance in this sector is therefore crucial to total UK export performance, as it is to that of the other main countries, even though the share of manufactured goods in their visible exports varies according to the nature of their economies. The figures for 1976 were: United States: 66 per cent; France: 77 per cent; UK: 83 per cent; West Germany: 89 per cent; Japan: 96 per cent.

For many years there has been a marked decline in the UK share in the value of the main manufacturing countries' exports of manufactures, from about 16 per cent in 1960 to 9 per cent in 1976. During the same period there has been a lesser decline in the United states share (about 23 to 17 per cent) little change in the shares of West Germany (about 20 per cent) or France (about 10 per cent), and a marked increase in the share of Japan from 7 per cent to 15 per cent. The UK share has fallen much more rapidly in Commonwealth markets than elsewhere, but overall this country's loss of share reflects the fact that in volume terms UK exports of manufactured goods increased at an average annual rate of growth of 5 per cent, only about half that of the main manufacturing countries as a whole (9 per cent) and only about a third of that of Japan (15 per cent).

This pattern is similar to that of the growth rates of gdp and industrial production. Similarity in rates of growth of exports of goods as a proportion of gdp in all the countries considered and the pattern of growth rates of gdp and industrial production and of exports of manufactures illustrates the close relationship between trade, industrial and general economic performance. Lack of competitiveness makes for slow growth, whether at home or abroad.



Estimates for 1977 are given on the graph, but consistent with other international comparisons made the text refers to the 1976 figures. The 1960 estimates made for the purpose of the text are not included on the graph.

Over the past four or five years UK export volume growth has tended to increase at rates closer to competitor countries and it has been holding its own in market share by value. This relative improvement may reflect in part the end of the period in the 1960s when, for example, the UK was losing ground most rapidly in Commonwealth markets without sharing in the rapidly increasing trade within the original EEC, and UK exporters were handicapped by an over-valued exchange rate. In recent years the UK has generally been in a somewhat more favourable competitive position in terms of prices and costs, while the UK share of world trade also seems to hold up better when trade is growing relatively slowly, as it has done over the period 1974-77.

Comparisons with Britain's major competitors in the world's export markets show that we have much in common with them. The main difference in terms of export performance lies in the persistently slower growth of UK exports of manufactured

goods. In seeking an explanation for this, the survey examines in more detail, first, whether particular features of industrial competitiveness appear to have had a marked effect on export performance, and then looks at the changes which have taken place in the pattern of UK exports by market and product.

Competitiveness and exports

There is some evidence, as would be expected of a broad association between measures of relative price competitiveness of UK manufactures (with all the imperfections of such measures) and UK performance in exports of manufactures relative to that of the main manufacturing countries as a group. It is also clear, however, that a steady decline in the effective exchange rate has not resulted in any turn-around in this country's export performance. The UK's competitive position has shown large fluctuations over the years, but there has not been any noticeable long-term improvement in performance. The decline in the effective exchange rate has done little more than compensate for our higher inflation rate and lower productivity growth as compared with other countries.

Depreciation cannot be expected to secure a permanent advantage in trade performance because it causes price and cost changes which themselves erode the initial effect on competitiveness. The lags in this process are, however, long; and they can also be modified by prices and incomes policies. In practice, the gains in competitiveness through depreciation in 1972 and 1973 were lost quite rapidly as sterling remained steady against other currencies in spite of a high relative rate of inflation in the UK. On the other hand, at least on some measures of competitiveness, the recent slow growth in wages has helped to maintain at least some of the advantage gained in 1976 despite the strength of sterling last year. But however long the process of cost and price adjustment takes, depreciation can do no more than provide industry with time to take advantage of the margin of competitiveness gained in the interim to secure increased market penetration and to improve quality and other non-price aspects of successful competition in trade.

Not all exports are equally price sensitive. For example exports of sophisticated machinery are much less price-sensitive than basic cotton cloth, and therefore suffer less from any loss of price competitiveness. This confirms the common wisdom that in the long term manufacturing output and employment would best be protected by action aimed at reducing unit costs, and improving non-price competitiveness, but that in the short term the exchange rate can have a very significant effect on the competitiveness of UK exports.

Employment, investment and productivity

The proportion of manufacturing in total UK employment has declined by about one-sixth since 1960, less than in the United States. However, in France, West Germany, Japan and Italy the proportion has been stable or slightly increasing over the same period. In 1976, West Germany and Italy had a rather higher proportion of employment in manufacturing than the UK; for the United States, Japan and France, the proportion was lower.

Employment in manufacturing as a percentage of total employment

	UK	USA	Japan	Sweden	West Germany	France	Italy
1959	35.3	31.3	20.6	n.a.	36.8	28.2	25.8
1960	36.1	31.0	21.3	n.a.	37.9	28.0	26.4
1961	36.1	30.2	22.5	n.a.	38.4	28.2	27.5
1962	35.4	30.3	23.4	31.8	38.8	28.4	28.0
1963	34.8	30.0	24.1	30.8	38.7	28.7	29.0
1964	34.9	29.6	24.3	31.8	38.8	28.1	28.5
1965	35.0	29.7	24.4	32.5	39.3	27.7	28.6
1966	34.9	30.0	24.5	31.2	39.3	27.6	28.9
1967	34.3	29.5	25.4	30.7	38.7	27.4	29.6
1968	34.2	29.1	26.1	30.5	39.0	26.9	30.2
1969	34.7	28.6	26.7	30.1	40.0	27.6	31.0
1970	34.8	27.3	27.0	27.6	40.5	27.8	31.7
1971	34.1	26.1	27.0	27.3	40.2	28.0	32.0
1972	32.9	25.9	27.0	27.1	39.7	28.0	32.1
1973	32.3	26.1	27.4	27.5	39.8	28.1	32.2
1974	32.3	25.6	27.2	28.3	39.7	28.1	32.6
1975	31.0	23.8	25.8	28.0	38.9 e	27.8	32.6
1976	30.2	23.9	25.5	26.9	37.9 e	27.5	32.5

Investment in UK manufacturing, measured as a proportion of manufacturing output, is comparable with that in competing countries, although the comparatively slow rate of growth of manufacturing output does imply that the growth of the capital stock has not kept pace with competitors. The evidence suggests that in terms of the proportion of resources devoted to manufacturing the UK's experience has not been markedly different from its competitors.

The main difference has been in the rate of growth of productivity. This in general improved less rapidly than elsewhere, and there is a close correlation between falling relative labour productivity in the UK, the declining UK share of all industrial countries' gdp and this country's loss of share in non-Commonwealth markets. A faster growth of productivity would have helped to contain the rise in costs and contributed to better price competitiveness. In addition, the UK's performance, or at least some aspects of non-price competitiveness, such as delivery, would probably have been better. In international comparisons high rates of productivity growth are generally associated with high rates of output, export growth, and consequently employment.

That the UK appears to make relatively poor use of the investment that has been made is reflected in evidence of a noticeably low level of additional output from investment as compared with many other industrial countries. This is supported by a number of substantial and detailed studies comparing labour productivity here and in other countries and analysing the specific causes of weakness. These studies are supported by specific evidence from companies about the relative productivity of, for example, identical car assembly plants in Britain and abroad.

Industrial relations are another aspect of general efficiency in industry. It is widely believed that the UK's reputation for bad industrial relations affects exports. At times when strikes in the UK have been much in the news, commercial officers in embassies abroad have reported an apparent effect on the attitude of foreign buyers to, for example, the likely reliability of British suppliers as regards delivery and spares support. However, it has not proved possible to demonstrate a statistical link between UK export performance and the course of industrial relations during the late 1960s and early 1970s.

Profitability

A factor which might be more specifically related to export performance is the profitability of exports relative to home production for domestic sale. There is no direct data on the relative profitability of exporting. Indirect indications suggest that since the early 1960s the trend has been towards higher relative profits on export business, though exchange rate changes have caused considerable short-term fluctuations.

Lack of internationally comparable data makes it impossible to make confident comparisons about absolute levels of industrial profitability internationally. However, it does appear that overall industrial and commercial profitability has fallen here rather more rapidly than in many competitor countries. This is not inconsistent with more general evidence about the relative efficiency of UK manufacturing industry but could equally imply that domestic policies have constrained profitability in the UK rather more than in competitor countries.

Overseas investment

Outward direct investment can benefit the UK economy by providing a basis for future earnings and by enabling UK companies to preserve or expand overseas markets for UK exports. The initial effect upon UK exports of a direct investment overseas is likely to be positive, because British firms will tend to install some British equipment. But the continuing effects upon UK exports could be positive or negative. On the assumption that manufacturing investment abroad had been entirely defensive – that, in the absence of a UK subsidiary, a similar foreign-owned factory would have been set up – it has been argued that, on average, the effect upon UK exports has been slightly favourable.

Discussions with companies about their strategy to maintain a hold in the markets of developing countries which are starting their own manufactures and increasing protective barriers to imports indicate that companies' strategy is often to invest in local manufacture, sourced initially from UK production; and as (often under local political pressure) local sourcing builds up for product A, to follow a similar pattern for product B. In this context industry sees overseas investment as a necessary part of retaining and developing a market for British exports rather than as 'export of jobs'.

	Peak to peak periods	Investment in manufacturing as a per cent of output in manufacturing	Average annual growth in manufacturing output	Increments in output for increments in capital expenditure
	Chosen	Peak to peak %	Peak to peak %	Peak to peak Japan = 100
USA	1966-73	18.3	2.4	32
West Germany	1962-73	12.8	5.5	104
France	1961-73	22.3	6.4	70
Sweden	1962-74	17.8	4.8	66
UK	1960-73	15.4	2.6	41

UK exports by market and product

Changes in the percentage distribution of UK exports by area from 1950 to 1977 show a massive geographical switch in UK exports. The most striking feature is the steadily growing importance of western Europe for UK exports (up from 31 per cent to 53 per cent, with 36 per cent going to other EEC countries), almost exactly matching the declining importance of the Commonwealth (down from 38 per cent to 14 per cent). There has also been a doubling in the importance of the oil-exporting countries as a market, for UK goods (up from 6 per cent to 13 per cent since 1974).

Distribution of exports by area

Percentages

	1960	1965	1970	1975	1976
UK exports to					
Developed	63	71	73	69	71
Developing	33	26	23	27	26
Centrally planned	4	3	4	3	3
West Germany exports to					
Developed	75	81	82	73	75
Developing	20	15	14	18	18
Centrally planned	5	4	4	8	7
France exports to					
Developed	56	71	74	69	70
Developing	40	25	22	25	24
Centrally planned	4	4	4	6	6
USA exports to					
Developed		64	69	60	61
Developing		32	30	37	35
Centrally planned		1	1	3	3
Japan exports to					
Developed		51	55	42	48
Developing		44	40	49	45
Centrally planned		5	5	9	7

OTS basis. Figures exclude a small amount of unspecified exports and therefore do not always add to exactly 100.

An important factor in the switch away from the old empire markets has been the particularly rapid loss of share in those markets – down from 30 per cent to 12 per cent since 1960 – to which attention has already been drawn. In 1960, the UK share of these markets was above that which would be expected on simple economic grounds – there was a clear element of discrimination in favour of goods from the UK, partly achieved through tariff structures and partly through the historic influence of custom and traditional linkages.

As the influence of the UK in these countries declined and as the advantage of preferential tariffs was eroded, the market share of the UK declined towards that which would be expected in a competitive market. Japan, because of its location close to India and Australasia, was a principal beneficiary of this trend away from favoured access for the UK. It seems likely that western Europe's share of UK exports will continue to rise, both because the UK share in

Commonwealth markets still has some way to fall before it is comparable to that in the rest of the world and also because western Europe has historically increased its demand for imports faster than has the Commonwealth.

But this country's experience is not unique; in the 1960s, the importance of the developing-country markets fell in the case of all the UK's competitors, with France in particular sharply reducing, from 40 per cent to 22 per cent, the share of exports going to developing-countries. Since 1974 the surplus of the oil-exporting countries has gone some way towards restoring the importance of the markets of the developing-countries for the UK as for others.

Interestingly, the Japanese have continued to rely on developing-countries to absorb 45 per cent of their exports, but within this relatively steady figure they have sharply reduced their dependence on markets in the non-oil developing-countries of Asia and Africa from 35 per cent in 1960 to 20 per cent in 1976.

Another factor which is likely to strengthen the tendency for UK exports to concentrate still further on Europe, and one which probably still has a long way to go, since it entails large-scale long-term investment decisions, is for leading firms with large resources and a successful record to plan increasingly on the assumption that they will be trading within, rather than into, the EEC. This is already the pattern of the largest companies.

It is increasingly likely to be adopted by smaller firms, either by individual growth or by mergers and acquisitions. It implies marketing and may imply manufacturing through firms that are wholly owned subsidiaries in the target country and seeking to identify with the market background.

At the same time United States and Japanese companies are investing in the UK with the object of exploiting the EEC market from within. It is not possible to quantify the likely net effect of this new pattern of investment, but where it involves an addition to the level of resources employed in the UK it seems likely that it will lead to an increase in net exports.

Export/import ratios

Changes in the patterns of trade (including imports) also show up in visible trade ratios, the proportion of imports covered by exports. The UK's trade ratio with western Europe improved in the 1960s, but fell rapidly in the early 1970s, because imported manufactures were sucked in by the boom of that era, and this was followed by the change in the UK pattern of food imports on entry to the EEC, although the ratio has now recovered to about the level of 1972.

In contrast, the ratios for trade with north America and the other developed group of countries are still below this level; in the latter case, the 1977 ratio is the lowest of the decade, reflecting the recent growth in imports from Japan.

UK exports by product sector

An analysis of the pattern of UK industrial activity between 1970 and 1976 shows for each major group of industries the change in their share of UK manufacturing net output – which are the larger sectors and how fast they have grown or declined, whether their ratio of exports to imports is favourable (surplus) or unfavourable (deficit) and whether it has increased or decreased.

For example, the engineering sectors have had declining export performance, but mechanical engineering's share of manufacturing net output has fallen whilst that of electrical and instrument engineering has grown; the chemicals, coal and petroleum products sector has both increased its share of manufacturing output and improved its export/import ratio; although the export/import ratio of the vehicles, ships and aircraft industries has fallen steeply, they are still, together, one of the most successful exporting sectors; and the textiles leather and clothing sector has both declined overall and moved from being a net exporter to a net importer.

These broad trends provide some measure of the average performance of the different industries within each sector. If one examines each of the sectors in turn to see how its different component industries have fared, one can select those industries of significant size whose performance has diverged most markedly from the norm for the sector as a whole. For example, within the mechanical engineering sector, industrial engines and agricultural machinery have seen marked reductions in the trade ratios, while construction equipment had improved its position. The growing exports of the computer and other electronic industries have partially compensated for the decline in electrical consumer goods. Carpet exports have been a bright spot in the generally declining textile industries. And of course there are successful firms improving their export performance in even the most rapidly declining industries, and vice versa.

Among the factors which seem to favour success are some, like access to raw materials or climatic advantage, which may confer a permanent advantage and others, like traditions of craftsmanship and technological advance, which may be more temporary. The sector working parties (SWPs) are seeking to highlight such advantages in their analysis of the strategic opportunities for the UK.

Improving all the factors of non-price competitiveness is a theme, both of the Industries Strategy and the British Overseas Trade Board. Evidence reported through the BOTB suggests that this country's competitors are more successful in competing on such matters as reliability, design, delivery and servicing, but the SWPs have stressed the importance of improved marketing and customer service as ways to improve marketing and customer service as ways to improve the UK's market share.

Firms must take the lead in this, but the government assists by promoting good product design aimed at world markets, both directly through the nationalised industries, and government procurement policies, and also through the work of the National Economic Development Office, the SWPs, BOTB and the Design Council, all of which are paying increased attention to design and other non-price competitive factors; by promoting good marketing practice; and by assisting market research, market intelligence, and promotion activities.

But price has played its part too. A limited inquiry undertaken by the Department of Trade overseas projects group in April 1977 among the major contractors suggested that, although off-the-shelf items of hardware from UK manufacturers were competitive, certain specialist items of equipment presented problems. Reasons for these included the provision for inflation and other risk factors and/or the lack of competition in the home market with comparatively low productivity. Further investigation is in hand.

There is clearly no single explanation of success or failure. In some cases poor marketing seems to have let us down; in other cases the right product may not have been available to meet the needs of the world market. In some cases firms may have felt obliged to include a large margin in their estimates to cover the risk of UK cost inflation; in a few cases competitors seem to have had more aggressive government export services behind them.

If there is no single explanation, there is no single answer either. But there is a common theme: the market is constantly changing and providing new opportunities, especially in other countries growing more rapidly than we have been. Those who are quickest at spotting the changed requirements and reacting to them increase their share at the expense of those who are not so quick on their feet.

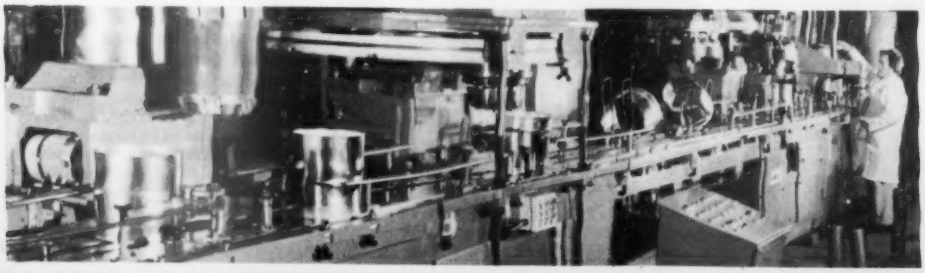
A study of the market and commodity pattern of UK exports over the period 1963/64 to 1972/73 suggests that while the pattern might have had some influence in determining the rate of growth of our exports, in no way could it be regarded as a major factor capable of explaining why UK exports in manufactures have grown more slowly than world trade in manufactures generally. The study worked out the different rates of growth achieved by the other main manufacturing countries collectively in the different world markets. It then found that if UK trade to these markets had grown at the same rate as the average of its competitors, world wide it would have lost only one-seventh of the market share which we actually did lose.

A similar result was obtained by a similar analysis of trade broken down into main commodity groups, and a study of non-oil developing country markets from 1970 to 1975 also suggests that while the market pattern did have some effect on our share the effect was still relatively small. These studies did not treat the Commonwealth as a distinct market, in which the loss of tariff and other advantages will have contributed significantly to a greater loss of market share. However, taking account of the Commonwealth factor, it is possible to conclude that while the major part of the UK's loss of export market share worldwide is related to poor economic performance generally, this has been compounded by a much sharper loss of share in Commonwealth markets as traditional ties with these markets have loosened.

Implications and conclusions

This brief statistical and economic survey points to some implications and conclusions.

- ☐ Clearly the UK is heavily and increasingly dependent on foreign trade in both goods and services. All the underlying technological, economic and social trends reinforce this dependence both of our own economy and of those of other countries.
- ☐ There has been a massive geographical shift in export pattern, but the analysis suggests that this has not been the major factor in the UK's relatively poor performance. In place of a former reliance on Commonwealth markets, the UK's trade interest is now heavily centered in the more demanding but more open markets of Europe (53 per cent of exports of goods including 36 per cent to the EEC countries).
- ☐ Export performance is closely linked to total industrial performance. In both we have done worse than our main competitors, but the decline of our share of export trade in manufactures has been slowing and in recent years we have been holding our own.
- ☐ Increasing the productivity of manufacturing industry would contribute in a number of ways to an increase in exports – through lower prices and probably also through better non-price competitiveness. It would also lead to an increased share of our own home market.



Overseas trade export services

Ellerman makes new Lebanon arrangement

As a result of the official closure of the Lebanese port of Beirut in the continuing emergency, Ellerman Prince and Ellerman Strath has temporarily transferred its operations to Tripoli.

Ellerman's Beirut agent, Costa Bitar Transporteur Conseil, is now operating from Tripoli through the office of sub-agents, Société D'Emmagasinage et de Transport International SARL.

Groupage (lcl) cargo which is received on a continuous basis at Victoria deep-water terminal in London and at Speke freight terminal in Liverpool, for delivery in Tripoli, and full container loads (fcls) for Lebanese destinations are being accepted. Rates can be provided for fcls for on-carriage within the Lebanon and can be obtained from Ellerman City Liners or by receivers from Costa Bitar in Tripoli. For the time being, fcls for on-carriage to the hinterlands are being carried via Tartous.

Further information: circle 147

Strongbox now available from stock

Tidd Strongbox van trailers are to be available from stock for the first time, the company has announced. A selection of 33 ft and 40 ft Strongbox were built during August at the company's St Neots factory, and are offered for immediate delivery.

Further information: circle 148

Autotelex to Greenland and the Philippines . . .

Britain's telex links with the Philippines telegraph and telephone corporation network have gone automatic. The new service follows the extension of autotelex to Greenland in July, and brings to 115 the number of countries which Britain's 72 000 telex users can contact direct, without the help of an international telex operator.

With the new service to the Philippines corporation system, UK telex users can now set up their own international calls direct to four of the country's five telex networks. The exception is the Capwire system where users continue to require UK operator assistance.

An autotelex call to either Greenland or the Philippines costs 90p a minute, with a one-minute minimum; operator calls bear a three-minute minimum of £2.70. VAT is extra on these charges.

Further information: circle 149

. . . and high-speed data to Italy

For some computer users, sending computer data by phone to Italy is now cheaper. With the introduction of International Datel 2400 to Italy, enabling users to send data at up to 2400 bit/s, it is possible to transmit at least twice as fast as before. The highest rate for a Datel service to Italy was previously 1200 bit/s, using International Datel 600.

International Datel 2400 is designed for alternate bothway (half-duplex) transmission of binary data at 2400 or 1200 bit/s over a directly dialled international telephone connection using the public network. A supervisory control channel in the reverse direction can be provided if required.

Using international direct dialling (IDD), International Datel 2400 is available to Belgium, Denmark, Finland, France, West Germany, Netherlands, Norway, Sweden, Switzerland, and South Africa. Charges for an IDD data connection are the same as for a corresponding directly dialled international telephone call. International Datel 2400, connected by the operator, is also available to Hong Kong, Singapore, the United States and the United Arab Emirates (except for Ras al Khaimah).

Further information: circle 150

Sealink development at Harwich

British Rail-shipping and international services division is investing nearly £2.5 million to provide a new double-width vehicle ramp and additional standage for commercial vehicles at Harwich, Parkeston Quay.

The new ramp will replace an existing single-width ramp now in operation at Middle West Quay which is inadequate to meet the needs of modern, high-capacity, two-vehicle-deck freight vessels now using the port. It will be assembled off-site before being floated into position as a complete unit, and should be operational by May 1979.

The development also includes provision of an additional 3.5 acres of paved standage for commercial vehicles.

Further information: circle 151

East Anglian export company formed

Anglia Export Services of Norwich has been formed following the closure of Albany Freight Ltd's branch offices throughout the UK. The company is able to offer a specialised export and import service geared to East Anglian industries requirements from its new purpose built 3500 sq ft warehouse and offices situated adjacent to the regional airport of Norwich. Documentation, packing and insurance through to worldwide delivery by road, sea or air modes of transportation are undertaken.

The company operates its own fleet of trucks for collection and delivery throughout East Anglia and also operates a trunker service to the ports of Felixstowe, Tilbury, London and Southampton on a regular basis. Inter-modal container services and personal effects shipments are a speciality of the company.

Further information: circle 152

Cunard forms ship management company

The Cunard Steam-Ship Company Ltd has formed a separate company, Cunard Shipping Services Ltd, to provide management services for the various cargo ships of its subsidiary – Cunard-Brocklebank Ltd – and to concentrate on securing further management agreements with other owners.

Further information: circle 153

UK businessmen going overseas

British businessmen intending to travel overseas are urged in their own interests to make the earliest possible contact, before going abroad, with the Export Services and Promotions Division of the Department of Trade (at the appropriate regional office for firms outside London, and Export House, 50 Ludgate Hill, London EC4M 7HU for firms in London and the South East of England). The department, in co-operation with commercial officers at embassies, high commissions and consulates overseas, is in a position to provide advice when it is required, and to help, where appropriate, in making trade contacts related to the purpose of the visit. Even where a businessman does not require specific assistance it is valuable for him to meet the commercial officers to get up-to-date information about the market. The Department of Trade would therefore welcome receiving notification of any businessmen intending to travel overseas. To enable the overseas commercial officers to be of the greatest assistance to UK visitors the department needs to be able to brief the overseas officers as fully as possible. The range of information required for this purpose includes details of the firm, their products/services and the purpose and background to the visit.

Freepost reader service

For further information on items in this section, circle the corresponding number on the reader services page near the end of the magazine.

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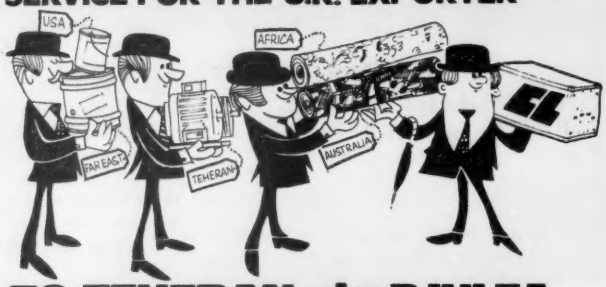

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Overseas trade country data

Australia

Protection for stud link chains. The Australian government has received a request for temporary protection from local producers of the following:

Stud link chain with a rod diameter greater than 25.4 mm falling within tariff item 73.29

Requests for temporary protection are initially considered by the department concerned and at a later date they may be referred to the Temporary Assistance Authority (TAA) for inquiry and report within 30 days of the date of reference. Any temporary protection that may be accorded goods of local manufacture on the recommendation of the TAA would be in the nature of a holding action pending government consideration of the long-term protection of the local industry.

Interested parties who wish to make their views known on this application for temporary assistance should send their comments to reach the Department of Industry and Commerce, Canberra, PO Box 80, ACT 2600 not later than 22 September.

Inquiries: CRE 01-215 5318. Ref. CRE 1260/78.

Lubrication nipples. A notice in *Trade and Industry*, 10 March, reported that the Australian government had substantiated the claim by local industry that its sales were being seriously affected by dumped imports from the UK of lubrication nipples. The notice also reported that an Australian customs representative in London would be making inquiries to establish a tentative normal value for these goods in the UK.

The Australian government has now reported that no further anti-dumping action is intended.

Inquiries: CRE 01-215 5319. Ref. CRE 36493/2.

Further information

In many cases further information on the notices published on these pages is available to British exporters from the Department of Trade. The main branches concerned are: Commercial Relations and Exports (CRE) Divisions, 1 Victoria Street, London SW1H 0ET (tel: direct dialling); and Overseas Tariffs and Regulations Section (OTAR), Export Data Branch, Export Services and Promotions Division, Export House, 50 Ludgate Hill, London EC4M 7HU, tel. 01-248 5757. In each case, the relevant information source is indicated at the end of the notice by its initials (OTAR or CRE) and, in the case of OTAR, the telephone extension.

Polypropylene resins. A notice in *Trade and Industry*, 2 June, reported that anti-dumping investigations were proceeding against polypropylene resins originating in various countries including the UK. The Australian government has now announced that, from 4 August, dumping duties have been applied to imports of this commodity originating in the UK, West Germany, Italy, Belgium, Taiwan and Japan.

Inquiries: CRE 01-215 5319. Ref. CRE 36493/2.

Injection and puncture needles. A notice in *Trade and Industry*, 5 May, reported that the Australian government was considering whether temporary protection be accorded to local manufacturers of hypodermic needles. Nothing further has been heard of this investigation.

However, as a result of tariff identification problems and since the duty on all single-use needles was due to be reduced to 'free' on 18 August, the government has asked the Industries Assistance Commission (IAC) to inquire and report within 90 days whether long-term protection should be given to local manufacturers of all injection and puncture needles falling within tariff item 90.17.42.

Further details will be published as soon as they are received.

Inquiries: CRE 01-215 5319. Ref. CRE 897/78.

Brooms and brushes. Following a report by the Industries Assistance Commission, the Australian government has announced the following import duties:

Brooms and brushes (tariff no. 96.01) will now have a duty rate of 25 per cent; this will apply to the general and preferential tariff.

One exception is iron or steel brush roll hair curlers (re-classified under tariff heading 73.34) will have a general duty rate of 22.5 per cent, while the preferential rate will be 15 per cent.

Inquiries: OTAR 01-248 5757 ext. 468/469/401.

Colombia

Tariff amendments. Colombian decree 1345, 10 July, has amended the duty on the following items (previous rates shown in brackets):

Tariff	Commodity	Duty (Ad. val)
08.11.02.99	Other fruit preserves	25% (20%)
10.05.89.00	Other maize not for sowing	9% (1%)
10.07.89.02	Sorghum	9% (1%)
75.01.01.00	Nickel mattes, speiss and other intermediate products	5% (10%)
84.10.01.00	Pumps for the sale of fuel	55% (35%)
84.10.90.01	Parts for items of sub-heading 01.00	40% (35%)
89.01.02.00	Pleasure and sports craft	55% (120%)

The same decree reduces the duty on oxime-based preparations in tariff heading 38.19.89.99 to 5 per cent until 31 December 1978. It also modifies tariff heading 01.06, live animals, by the addition of a further sub-heading 01.06.89.03 – for zoological parks – ad. val duty 15 per cent and modifies tariff 97.08 by the deletion of sub-headings 01.00 and 89.00.

Inquiries: OTAR 01-248 5757 ext. 474/476.

Greece

Duty reduction. The Greek press recently announced that import duty on polyvinyl chloride classified under tariff heading 39.02C2bII has been reduced to 9.5 per cent for EEC countries and 15 per cent for other countries.

Inquiries: OTAR 01-248 5757 ext. 439.

Import of pork. The Greek press announced recently that imports of fresh pork would be allowed until 30 October 1978.

Inquiries: OTAR 01-248 5757 ext. 439.

Liberia

Development plan. A copy of the Liberian national socio-economic development plan 1976-80 has been received in the Export Services and Promotions Division.

It is available for inspection at the Statistics and Market Intelligence Library, Room D 16, Export House 50 Ludgate Hill, London EC 4 7HU (tel. 01-248 5757 ext. 368/369). After a period of two weeks copies will be available for loan. Applications will be dealt with in strict order of receipt.

Malaysia

Import duty changes, various items. The Malaysian government have, with effect from 20 July, amended the first schedule to the customs duties order 1978 so that it now reads as follows:

Heading no./Description	Unit of Qty.	Import duty Full	Pref.
19.02			
100 Malt extract	kg	Nil	
Other:			
910 used as infant food	kg	Nil	
other:			
991 not containing cocoa	kg	15%	
999 containing less than 50% by weight of cocoa	kg	15%	
32.09			
390 Solution as defined in Note 4 to Chapter 32		30% or $1.06 whichever is the higher	
38.07			
300 Pine oil (excluding 'pine oils' not rich in terpineol)		Nil	
39.07			
Articles of non-rigid foam or sponge products:			
911 corset busks and similar supports for articles of apparel or clothing accessories	Value	Nil	

Heading no./Description	Unit of Qty.	Import duty Full	Pref.
919 other	kg	50% or $1.10 whichever is the higher	
40.14 Articles of foam rubber (other than those falling with Heading no. 94.04):			
110 corset busks and similar supports for articles of apparel or clothing accessories	Value	Nil	
190 other	kg	35%	
76.16			
400 Gauze, cloth, grill netting reforcing fabric and similar materials of aluminium wire	tonne	Nil	
500 Expanded metal, of aluminium	tonne	Nil	
85.12			
523 Ovens	No	55%	

Inquiries: OTAR 01-248 5757 ext. 469/401/468.

New Zealand

Tariff amendments. The New Zealand government has issued the customs tariff (Gatt) amendment order 1978 which came into effect on 1 July 1978 whereby CCCN 20.07 has been amended to read as follows:

Number/Goods	Rates of duty Normal tariff	Rates of duty Preferential tariff	Statistical key Code	Unit	Description
20.07 Fruit juices (including grape must) and vegetable juices, whether or not containing added sugar, but unfermented and not containing spirit:					
In other containers:					
Other:					
20.07.25					
Fruit juices	25	Aul 20	01L	1	Orange
		Can 20	11H	1	Grapefruit
		DC 20	21E	1	Lemon
			31B	1	Lime
			41K	1	Other citrus
			51G	1	Pineapple
			61D	1	Other fruit
			71A	1	Mixtures
20.07.028					
Other kinds	30	Aul 25	01K	1	Tomato
		Can 25	11G	1	Other vegetable
		DC 25	21D	1	Mixtures

and the rates of duty for tariff numbers 35.07.005; 55.09.04; and 55.09.051 have been amended to read as follows:

Goods	Item Number	Rates of Duty Normal Tariff	Preferential Tariff
Enzymes, Rennet	35.07.005	15	Aul free Can 10 DC 5
Cotton woven fabrics, bleached dyed or printed	55.09.041 to 55.09.051	7.5 Can free DC free	Aul free Can free DC free

Inquiries: OTAR 01-248 5757 ext. 401/468/469

CRE tel. Direct dialling

OTAR telephone 01-248 5757
Extensions to **OTAR** numbers are given at the end of each notice .

Nigeria

Shipping. The Nigerian Ports Authority has issued an administrative order which states that ships will not be allowed to berth in Nigerian ports until 50 per cent of the customs duties on the cargo to be unloaded in Nigeria has been paid.

Inquiries: CRE 01-215 3064.

Portugal

Drawback. Portuguese *Diario da Republica* 167, 22 July, published order 402/78, which allows the import under drawback of sheets of float glass for the manufacture of windscreens and windows for motor vehicles.

Duty on 100 kg of glass will be restituted for each 70 kg of windscreen and windows re-exported.

Inquiries: OTAR 01-248 5757 ext. 460.

Vegetable proteins. Portuguese *Diario da Republica* 161, 15 July, published order 384/78. This order permits the manufacture and sale of vegetable proteins (particularly soya) as food products in their own right or in combination with meat products, in the specified percentages and purity.

Copies of the order (in Portuguese only) may be obtained from OTAR 01-248 5757 ext. 460.

Radio telephones – type approval. Portuguese *Diario da Republica* (series 3), 157, of 11 July, published new regulations issued by the Correios e Telecommunicacoes de Portugal (CCT), which lay down conditions for the use of low-powered radiotelephonic equipment in the 26.98-27.41 MHz band.

Among other things, these regulations stipulate that importers, local manufacturers or sellers must seek type approval for this equipment from the CCT Directorate of Telecommunication Services (DST). Copies of the full regulations (in Portuguese only) and a brief summary of the regulations are available.

Inquiries: OTAR 01-248 5757 ext. 460.

Saudi Arabia

Goods vehicle standards. New regulations for goods vehicle standards were published on 10 July and it is expected that these regulations will be enforced as from 1 September. These will limit the total overall goods vehicle weight to 40 tons. The limit on the load for fixed lorries is 18 tons and for tractor trailers 13 tons per axle or a total of 20 tons for a 2 axle vehicle. If companies have a load which will exceed the 40 tons overall maximum they must apply to the Ministry of Communications in Riyadh at least three weeks before the proposed date of haulage. It is understood that in the event of permission being granted companies will be required to make a refundable deposit: but no further details on this are available.

A copy of an unofficial translation of the regulations and the Arabic text is available.

Inquiries: OTAR 01-248 5757 ext. 7062/460.

Singapore

Imports of motor vehicles. United Kingdom exporters are advised that the Singapore government is considering introducing legislation to limit the level of exhaust gases permitted from motor vehicles. Further information will be issued when available.

Inquiries: OTAR 01-248 5757 ext. 401/468/469.

South Africa

Customs tariff changes. The following amendments were published in the South African *Government Gazette*, 4 August 1978:

R. 1588 CCCN 84.22. It is made clear that all overhead travelling cranes and goliath type cranes, single or double girder, fitted with electric motors, are classified in subheading 84.22 33.20.

R.1589 CCCN 87.07. The effect of this amendment is that in determining the mass of electric powered rider type fork lift trucks, the mass of the batteries is also being taken into account.

R.1591. CCCN 84.18. The rate of duty on laboratory centrifuges is reduced from 10 per cent to 5 per cent.

Industrial rebates

R.1590 (1) Items 307.01 and 307.02 are combined with the effect that item 307.01 now provides for a rebate of duty on raw materials for the manufacture of the products of tariff headings 39.01 to 39.06 of schedule no. 1.

(2) The provision for a rebate of duty on certain animal and vegetable oils for use as plasticisers in the manufacture of moulding powders and pastes, is withdrawn.

Inquiries: OTAR 01-248 5757 ext. 471/472/473/462.

Tariff application. Customs tariff application list 27/78, published in the South African *Government Gazette*, 25 August, contains an application to the Board of Trade and Industries for increase in duty on titanium oxides and titanium white.

British trade organisations thought to be interested in the application are being informed. Any British firm affected which wishes to make representations to the South African Board of Trade and Industries and belongs to trade organisation should, therefore, first contact its own trade association. If any firm proposes to make independent representations to the South African authorities and requires further information concerning the application, it should address inquiries to CRE 01-215 5274.

Spain

Temporary liberalisation. The Spanish *State Gazette*, 29 July, published a resolution of the ministry of commerce liberalising temporarily the import of goods previously subject to an import licence under the tariff numbers shown below:

05.04 A, 05.04 B, 05.15 B, all chapter 18, 21.07 B, 21.07 C, 21.07 E, 22.09 I, 25.02, 27.01, 28.14 A, 28.15 B, 28.46 B, 28.48 D3, 33.06 A, 34.01 B, 37.04 B, 37.07, 39.01 A, 39.01 B, 39.01 C1, 44.11, 44.15, 44.16, 44.18, 70.21, 73.23, ex 73.40 C1, 73.40 C2, 73.40 C3, 84.06 B2c, 84.06 B2d, 84.10 F2a, 84.10 F2b, 84.11 D3, 85.15 B1, 85.15 B2, 85.15 B3, 87.01 A2, 87.01 B2, 87.02 B1, 87.02 B2, ex 87.04, ex 87.05, 87.14 A, 98.01 A2b, 98.01 A2d, 98.01 B, 98.12 A

The duration of this temporary liberalisation is not known.

Inquiries: OTAR 01-248 5757 ext. 461/458/489/460.

Syria

Tetracycline prohibited. The Syrian health authorities published a decree on 9 August prohibiting the import (or local manufacture) of tetracycline, CCCN 29.44, on the grounds that it is harmful to children's teeth.

Inquiries: OTAR 01-248 5757 ext. 475/7062.

United States

Fuel economy. The *Federal Register* dated 4 August 1978 published a rule proposed by the Federal Trade Commission to ensure the advertising guidelines are consistent with the new Environmental Protection Agency labelling requirement. Written comments (five copies) by 5 September 1978 to Division of Energy and Product Information, Bureau of Consumer Protection, Federal Trade Commission, Washington DC 20580.

A copy of the text is available.

Inquiries: OTAR 01-243 5757 ext. 456/457/7312.

Cellulose insulation. The *Federal Register*, 8 August, published a rule by the Consumer Product Safety Commission establishing an interim mandatory safety standard for flammable and corrosive cellulose insulation. Insulation manufacture after 7 September 1978 must comply.

A copy of the text is available.

Inquiries: OTAR 01-248 5757 ext. 456/457/7312.

Consumer products safety. The *Federal Register*, 7 August, published a rule by the Consumer Product Safety Commission detailing the interpretation policy and procedure for informing the commission of substantial product hazards.

In the *Federal Register*, 9 August, a proposal to establish a rule governing the scope and conduct of investigations, inspections and enquiries under the Product Safety Act. Written comments (5 copies) on this proposal should be sent by 22 September 1978 to Consumer Product Safety Commission, Washington DC 20207.

A copy of the text is available.

Inquiries: OTAR 01-248 5757 ext. 456/457/7312.

Speciality steel. Imports in pounds weight from the EEC for under quota at 4 August 1978:

Plates of stainless steel (item 923.21) 553, 561

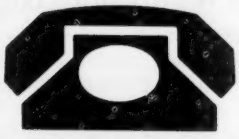
Inquiries: CRE 01-215 5397.

OTAR: help for exporters

Overseas Tariffs and Regulations Section (OTAR), Export Services and Promotions Division, Department of Trade, Export House, 50 Ludgate Hill, London EC4M 7HU, tel. 01-248 5757 can give you directly, or through your regional office, up-to-date information on the tariffs and customs regulations of overseas countries, import licensing regulations and restrictions including import quotas; certificate of origin; consular invoices and fees; labelling and marking requirements; foodstuffs, drugs and pharmaceuticals, agency legislation, setting up of a subsidiary company and the imports of samples. It also provides information, in collaboration with the Ministry of Agriculture, Fisheries and Food, on health regulations for livestock, meat, animal products and plants and seeds. In short, OTAR can help on almost all legislation which affects the entry of British goods into overseas countries.

Inquiries which concern the countries of more than one sub-section (excluding inquiries involving only EEC countries) should be made to OTAR's co-ordination sub-section of 01-248 5757 extension 452 or 454.

For information on specific countries, phone the number and extension given below



01-248 5757

extension

Sub-section A
1 Co-ordination of EEC regulations requirements and common customs tariff (CCT), Denmark, France incl. overseas territories, Greece, Turkey, Cyprus

408 Denmark (incl. Faroe Islands and Greenland). EEC legislation on tariff and non-tariff barriers relative to community trade
423 France and French overseas departments, French overseas territories, Comoros
439 Greece (incl. Dodecanese Islands), Turkey, Cyprus

2 Benelux, Dutch overseas territories, Irish Republic, Italy, Federal Republic of Germany

288 Belgium, Luxembourg, Netherlands, Netherlands Antilles, Aruba, Bonaire, Curacao, St Eustatius, St Martin (Dutch), Saba, Suriname
466 Italy, Irish Republic
467 Federal Republic of Germany

Sub-section B
Efta countries, Spain, Gibraltar, Malta, Israel, Macao

458 Israel, Norway, Gibraltar, Malta
459 Austria, Sweden, Switzerland
460 Portugal, Finland, Iceland, Macao
461 Spain, Canary Islands, Andorra

Sub-section C
1 North America, Bahamas, Bermuda, West Indies

455 Canada
456 USA (incl. Alaska, Caroline Islands, Guam, Hawaii, Mariana Islands, Marshall Islands, Panama Canal Zone, Puerto Rico, Samoa (US), Virgin Islands (US), Wake Island)
7312 Anguilla, Antigua, Bahamas, Barbados, Belize, Bermuda, British Virgin Islands, Cayman Islands, Dominica, Grenada, Guyana, Jamaica, Montserrat, St Kitts/Nevis, St Lucia, St Vincent, Trinidad and Tobago, Turks and Caicos Islands

2 South and Central America

474 Argentina, British Antarctic Territories and Antarctica, Cuba, Dominican Republic, Falkland Islands, Haiti, Paraguay, Uruguay, Bolivia, Chile, Colombia, Ecuador, Peru, Venezuela
476 Brazil, Costa Rica, El Salvador, Guatemala, Honduras, Mexico, Nicaragua, Panama

Sub-section D
Africa

462 Algeria, Ceuta and Melilla, Egypt, Equatorial Guinea, Libya, Morocco, Sudan, Tunisia, Western Sahara
471 Angola, Cape Verde, Guinea-Bissau, Jibuti (Djibouti), Malawi, Mauritius, Mozambique, Rwanda, St Helena and Tristan da Cunha and Ascension Islands, Sao Tome/Principe, Seychelles, Somalia, South Africa (with Botswana, Lesotho, SW Africa and Swaziland), Zambia, British Indian Ocean Territory
472 Benin, Burundi, Cameroon, Central African Empire, Chad, Congo (Brazzaville), Ethiopia, Gabon, Ghana, Guinea, Ivory Coast, Kenya, Madagascar, Mali, Mauritania, Niger, Senegal, Tanzania, Togo, Uganda, Upper Volta, Zaire
473 The Gambia, Liberia, Nigeria, Rhodesia, Sierra Leone

Sub-section E
Australasia and South East Asia, Eastern Bloc, China, Mongolia, Yugoslavia

401 New Zealand, Singapore, Thailand, W. Samoa, Chatham Islands, Cook Islands, Niue Islands, Tokelau Islands, Philippines
468 Australia, Solomon Islands, Cocos (Keeling) Islands, Christmas Island (Indian Ocean), Nauru, New Hebrides, Papua New Guinea, Albania, Bulgaria, Czechoslovakia, German Democratic Republic, Hungary, Poland, Romania, USSR, China, Mongolia, Yugoslavia
469 Brunei, Fiji, Hong Kong, Indonesia, Malaysia, Tonga, Gilbert Islands (incl. Ocean Island, Phoenix and Northern Line Islands), Tuvalu, Norfolk Island, Pitcairn Island

Sub-section F
Middle East (Part) and Asia (Part)

420 Afghanistan, Bangladesh, Burma, India, Nepal, Pakistan, Japan, Korea Democratic Peoples Republic, Korea Republic of, Sri Lanka, Taiwan, Yemen Arab Republic, Yemen Peoples Democratic Republic
475 Iraq, Jordan, Kampuchea (formerly Cambodia), Kuwait, Laos, Lebanon, Vietnam Socialist Republic of, Bahrain, Iran, Oman, Qatar, Saudi Arabia, Syria, United Arab Emirates

European community news

Government puts forward assembly elections proposals

Elections of British members to the European assembly should be carried out over the longer timetable used during British local elections, instead of that used at parliamentary elections. This is one of the proposals put forward in a white paper, 'Draft regulations for the conduct of European assembly elections in Great Britain', (Cmnd 7323, HMSO, 90p), published on 22 August. The white paper says that extra time may be important because of the greater size of assembly constituencies.

On the question of a candidate's deposit and nomination procedure, the white paper proposes that the candidate's deposit should be £600, and that the nomination paper should be subscribed by 30 electors. In its white paper, 'European assembly elections', Cmnd 6768, the government's preliminary view was that the deposit should be £500, with 50 subscribers. But during the passage of the European Assembly Elections Act it was felt that the deposit proposed was too low, and the local authority associations felt that the requirement for 50 signatures might lead to more nominations being rejected on purely technical grounds, and might make the task of checking nomination papers too difficult.

The white paper also proposes that the hours of poll should be 07.00 to 22.00, as at parliamentary elections. The elections will take place in the UK on 7 June, which is the first day of the period to 10 June determined by the community. The community has agreed that the counting of votes will not begin until each county has completed its poll. UK ballot papers will be locked away, uncounted until then. Counting will take place either on the evening of 10 June or during 11 June, at the discretion of the returning officer. It will be possible to check the total number of votes cast so that any discrepancies can be readily checked, and the regulations provide for verification to be carried out as soon after the close of poll as is practicable.

Candidates' election expenses should be regulated in the same way as at parliamentary elections, the white paper points out. Each candidate will be able to spend up to a maximun of £5,000 plus 2p for each entry on the register of electors. Currently, parliamentary election expenses limits are £1,750 plus 2p for each elector in a county constituency, and 1½p for each elector in a borough constituency.

These regulations are in accordance with the European Assembly Elections Act 1978, which provides for elections by simple majority in Great Britain and by the single transferable vote in Northern Ireland. They are in draft as a basis for consultation with the political parties, the local authorities and others interested, who are invited to send their views to the Home Office. The regulations are subject to the affirmative resolution procedure which means a debate will be held in both houses.

The draft regulations operate by applying the relevant provisions of the representation of the people acts and regulations. The principle that has been followed is to adopt the provisions as they apply for Westminster elections, and to make only the modifications that are necessary to meet the particular circumstances of the European assembly elections.

Not covered in the white paper are constituencies and returning officers. The Parliamentary Boundary Commissions for England, Wales, and Scotland, have published draft proposals for the 78 single-member European assembly constituencies. Representations have been received on the proposals and final reports will be submitted to the Home Secretary and the Secretary of State for Scotland probably next month. Northern Ireland forms one constituency.

Returning officers for the constituencies in Great Britain will be drawn from those at parliamentary elections and the Home Secretary will make an order specifying the returning officers when parliament has approved the constituency arrangements.

More community news

Information on European community matters and about member states can often be found in other sections of *Trade and Industry*. For this week's additional news, turn to the following pages:

Home news
Encouraging the smaller firm in Scotland 482

Overseas trade news
BOTB sponsors 1500 firms at German trade shows 497

Notices to importers
1703: Imports of trousers from Singapore 498

Export performance: no room for complacency 500

Country data
Greece 505
United States 507

Statistics
Registrations of British, community and foreign films 517

Commission rejects UK's fishing moves

The European commission said on 22 August that it could not accept the UK's conservation measures for Irish Sea herring which were announced last week. These involve the licensing of herring fishing in the British sector of the North Sea, largely around the Isle of Man, until 24 September when all fishing would be banned until the end of the year.

Commenting the same day on the commission's statement, fisheries minister John Silkin said he had informed the council of ministers in July that urgent action was likely to be needed to deal with the threat to the herring stock, reported by international scientists. No community action had been agreed.

The UK had therefore acted unilaterally, Mr Silkin said, under the terms of the Hague agreement, to restrict catches in UK fishery limits in line with scientific advice. The UK had asked foreign fisherman to keep down to their traditional share.

UK fishermen had had a quota imposed on them, corresponding to the division of the catch agreed last year. When that catch had been taken, and certainly no later than 24 September, the fishery would be closed.

Fertiliser regulations come into force

New regulations prescribing the methods of sampling and analysis of fertilisers were laid before parliament on 16 August.

The regulations introduce a revised sampling procedure for solid fertilisers, together with methods of analysis applicable to those fertilisers listed in the Fertiliser Regulations 1977 that may be sold with the designation 'EEC fertiliser'.

The new regulations also contain amendments to the operative dates and packaging requirements of the Fertilisers Regulations 1977, as they affect fertilisers sold in small packs not exceeding 25 kilograms or 10 litres. They come into force on 6 September.

Seminar in EEC procedures

'EEC procedures and documentation' a half-day seminar, organised by the Merseyside Chamber of Commerce and Industry, is to be held on 26 September from 14.00 to 17.00, at

the Holiday Inn, Paradise Street, Liverpool.

The seminar is aimed at all levels of personnel directly or indirectly involved in exporting to the EEC, Efta and associated states. This covers the specialised documentation required for trade within the EEC and between the EEC and other trading areas. Subjects covered include movement certificates, trading agreements, preferences, CCCN classification, community transit, community status, guarantees, free circulation, and EEC certificates of origin.

Further information is available from conference secretary, Mrs R. Homolka, Merseyside Chamber of Commerce and Industry, Old Hall Street, Liverpool L3 9HG, tel. 051-227 1234, telex 627110/628702 Chacom.

SDA promotes UK-EEC trade . . .

Scottish companies are being offered the chance to open the door to business in Europe through a workshop being organised by the Scottish Development Agency at the Central Hotel, Glasgow on 5 September.

Representatives of chambers of commerce, trade institutes and embassies from Belgium, Denmark, France, Germany, Holland and Italy will brief Scottish company executives on European business opportunities, promoting goods and services and joint industrial and commercial ventures.

The agency says that the workshop will allow Scots businessmen to question closely a wide cross section of European commercial officials.

. . . and develops new business data bank

A practical information bank which will allow a faster response to business inquiries from abroad is being developed by the agency.

As a test exercise, profiles of 300 manufacturing and distributive companies will be used to promote new business opportunities from a growing number of inquiries from other parts of the UK and overseas. The data is being gathered from interested firms with the help of local authority regional development officers and representatives of new towns and the Scottish Council (Development and Industry).

James Gorie, the agency's director of promotion and information underlined that it was a difficult exercise, and that it would take a year to monitor its effectiveness. 'We are trying to cut through red-tape and encourage Scottish and European companies to talk to one another direct. The real trick is to move information to the right entrepreneurs through effective channels. Our London, New York and Brussels office outlets will soon be able to help to achieve this,' he said.

Letters to the editor

Letters to the editor should be addressed to the Editor, *Trade and Industry*, Room 437, 1 Victoria Street, London SW1H 0ET, and *not* to HMSO.

New EEC documents

This list of EEC documents was deposited in the commons during the seven days up to 3 August 1978 (commission reference numbers, where appropriate, are given in parentheses). These documents are available for consultation at the European Communities Information Office at 20 Kensington Palace Gardens, London W8 4QQ.

EEC draft instruments

R/1963/78 COM(78)368
Proposal for a council decision on health protection measures in respect of the Republic of Botswana.

R/1965/78 COM(78)317
Proposal for a council regulation (EEC) determining, for the 1978-79 wine growing year, the prices to be paid under the compulsory distillation of the by-products of wine-making and the maximum amount of the contribution from the guarantee section of the European Agricultural Guidance and Guarantee Fund.

R/2027/78 COM(78)336
Proposal for a council regulation amending regulation (EEC) no. 2744/75 on the import and export system for products processed from cereals and from rice.

R/2028/78 COM(78)331
Proposal for a council regulation (EEC) amending regulation (EEC) no. 525/77 establishing a system of production aid for tinned pineapple.

S/1275/78 COM(78)370
Proposal for a council decision opening an additional quota for the importation into Italy of woven fabrics of flax from Poland.

S/1321/78 COM(78)394
Proposal for a council regulation, maintaining quantitative restrictions on the importation into Italy, France and United Kingdom of certain textile products originating in Greece.

Consultative documents

R/1720/78 COM(78)255
Commission report on some structural aspects of growth.

R/1882/78 COM(78)310
Third annual report (1977) on the European Regional Development Fund.

Temporary tariff reductions on imports of fish

EEC council regulation 965/78, 8 May gave details of the temporary tariff reductions on fish that had been agreed with effect from 1 July. The regulation says that some reductions are conditioned upon imports respecting the appropriate EEC reference prices. To assist importers meet this condition the EEC commission has published in the *Official Journal*, C174, 21 July, an explanatory note giving the prices which must be respected before customs authorities can apply the reduced rate of duty to a particular consignment. The annex to this notice gives the various species, categories and prices in sterling.

In the case of fresh or chilled cod, haddock and hake the prices to be respected vary depending upon the grade of fish concerned. Details of the grading requirements are contained in EEC regulation 103/76. Advice on grading can be obtained from the local offices of the fisheries inspectorates of UK fisheries departments.

Importers of fresh or chilled cod, haddock and hake from third countries who wish to qualify for the reduced rate of duty must first be authorised by customs for end-use relief. In addition, in order that customs can be satisfied that the reference prices for fresh or chilled fish have been respected importers should notify the fisheries inspectorate at least 48 hours in advance of the arrival of any consignment to make arrangements for the grades assigned to the fish to be checked. It is the responsibility of the importer to ensure that the fish is graded before it is offered for sale. In this way the fisheries inspector will be able to check the grading before the fish is sold and consigned to the purchaser, in case the selling price should be below the highest reference price for the species of fresh or chilled fish concerned. The inspector will issue a certificate to the importer if the grades assigned to the fish are found to be correct. If the inspector is not satisfied he will refuse to provide a certificate but the importer may then regrade the fish and ask the inspector to re-examine the consignment. The certificate should accompany the other customs documentation so that the reduced rate of duty can be applied as appropriate.

Inquiries: Local customs offices or International Customs Directorate, tel. 01-626-1515 ext. 2234 (reference price aspects) ext. 3284 (end-use controls).

PRICES TO BE COMPLIED WITH — Annex

CCT heading no. Species	Commercial characteristics [1] or presentation: Freshness category	Size	Presentation	Price to be complied with (£/tonne
ex 03.01 BI(h)	All categories	1, 2, 3	Gutted fish with head	235.83
Cod	Extra, A	1, 2, 3	Whole fish	184.79
fresh or chilled:	Extra, A	4	Gutted fish with head	
	B	1, 2, 3	Whole fish	170.71
	Extra, A	5	Gutted fish with head	
	B	4	Gutted fish with head	156.63
	Extra, A	4	Whole fish	
	B	5	Gutted fish with head	113.81
	B	4	Whole fish	
	All categories	5	Whole fish	85.06
frozen:	Whole fish: headless or in pieces			
	– With or without head			246.97
	– Other			379.96
ex 03.01 BI(k)	Extra, A	1, 2	Whole fish	170.12
Haddock	All categories	1, 2, 3	Gutted fish with head	
fresh or chilled:	Extra, A	4	Gutted fish with head	149.00
	B	4	Gutted fish with head	
	Extra, A	3, 4	Whole fish	106.18
	B	1, 2, 3	Whole fish	
	B	4	Whole fish	85.06
frozen:	Whole fish: headless or in pieces			
	– With or without head			183.03
	– Other			281.59
ex 03.01 BI(q)	All categories	1, 2	Gutted fish with head	488.67
Hake	All categories	3	Gutted fish with head	436.46
fresh or chilled:	All categories	4	Gutted fish with head	344.94
frozen:	Whole fish: headless or in pieces			
	– With or without head			224.68
	– Other			345.66
ex 03.01 BII(a) Fillets of hake fresh or chilled:		—		—
ex 03.01 BII(b) 7 Fillets of hake frozen	– With bones ('Standard')			388.94
	– Boneless			447.06

[1] The freshness categories, size and presentations are those defined pursuant to Article 2 of Regulation (EEC) no 100/76.

Statistics

The economy: selected indicators

Series are seasonally adjusted except where shown otherwise

	Gross domestic product (average estimate)	Consumers' expenditure	Fixed capital expenditure			Changes in stocks				Balance of payments		
				of which			of which					
			Total	Manufacturing industry	Distributive and service industries excl. shipping	Total	Manufacturing industry	Wholesalers	Retailers	Current balance	Visible balance	Invisible balance
	at 1975 prices		at 1975 prices			at 1975 prices				at current prices		
Base of index / Series in / Stock level at end-1977	1975	£ million	£ million			£ million 34,469	20,353	4,540	3,181	£ million		
1971	94.5	59 340	20 208	3 923	3 888	235	..	..	..	1 074	279	795
1972	96.7	62 762	20 239	3 398	4 055	73	..	..	..	126	−701	827
1973	103.4	65 497	21 609	3 504	4 674	2 983	1 336	432	624	−883	−2 354	1 471
1974	101.4	64 070	21 164	3 822	4 605	1 462	1 288	361	−180	−3 515	−5 195	1 680
1975	100.0	63 192	20 817	3 522	3 841	−1 925	−1 221	−249	−100	−1 617	−3 205	1 588
1976	102.9	63 320	20 489	3 345	3 926	261	316	131	13	−859	−3 510	2 651
1977	104.8	62 732	19 738	3 573	4 325	1 051	442	266	29	165	−1 612	1 777
1976 2nd qtr.	..	..	..	828	972	..	−46	−10	−88	−281	−909	628
3rd qtr.	..	..	..	849	1 005	..	83	81	27	−304	−1 097	793
4th qtr.	..	..	..	856	1 014	..	255	17	23	−279	−961	682
1977 1st qtr.	..	..	..	851	1 030	..	267	82	162	−493	−947	454
2nd qtr.	..	..	..	879	1 044	..	79	179	−18	−365	−764	399
3rd qtr.	..	..	..	910	1 103	..	−18	−80	−76	537	54	483
4th qtr.	..	..	..	932	1 149	..	115	85	−39	486	45	441
1978 1st qtr.	..	..	..	920	1 169	..	71	81	114	−305	−574	269
2nd qtr.	..	..	..	979	1 172	..	191 p	−15 p	102 p	221	−139	360
% change last 2 qtrs. on prev. 2 qtrs.	..	..	..	+3.1	+4.0							
on a year earlier	..	..	..	+9.8	+12.9							

	Industrial production		Personal expenditure		Prices and earnings					Labour (UK)			Visible trade (volume)	
	Total all industries	Total manufacturing industries	Retail sales	Cars: new registrations	Retail prices		Wholesale prices: all manufacturing industry		Average gross earnings of all employees (GB, all industries and services covered)	Unemployed excluding school leavers and adult students		Unfilled vacancies for adults	Export	Import
				monthly averages		% increase on a year earlier	basic materials and fuel used	manufactured products: home sales		mid-month count	% of total employees	mid-month count	On a balance of payment basis	
	at 1970 prices		at 1971 prices		(not seasonally adjusted)				(old series)				at 1975 prices	
Base of index / £m in base year / Series in	1970	1970	1971 16,296	thousands	Jan. 1974		1970	1970	Jan. 1970	thousands		thousands	1975 19,462	1975 22,667
1971	100.1	99.4	100.0	108.5	80.0	9.4	104.6	109.0	118.7	775.8	3.4	130.9	84.6	83.3
1972	102.3	102.0	105.3	138.6	85.7	7.1	109.2	114.8	134.0	854.9	3.7	147.3	84.5	92.4
1973	110.0	110.5	110.3	137.1	93.5	9.1	144.5	123.2	152.1	611.0	2.6	307.0	96.8	105.6
1974	106.3	108.9	109.0	102.8	108.5	16.0	215.3	152.0	179.1	599.7[1]	2.6[1]	302.7[1]	103.9	107.9
1975	100.6	102.2	106.7	97.2	134.8	24.2	235.4	188.7	226.6	929.0	3.9	150.0[1]	100.0	100.0
1976	101.4	103.2	106.5	104.7	157.1	16.5	299.0	219.6	261.9	1 269.8[1]	5.4[1]	120.4[1]	109.9	105.5
1977	102.7	104.0	103.6	107.1	182.0	15.8	340.1	261.7	288.5	1 378.1	5.8	155.6[1]	118.9	107.0
1977 1st qtr.	103.4	105.5	103.3	104	174.1	16.5	341.5	248.0	280.0	1 329.5	5.6	..	115.7	109.1
2nd qtr.	102.1	103.2	102.5	103	181.9	17.4	347.7	259.2	285.3	1 340.6	5.6	157.7	118.0	109.8
3rd qtr.	103.0	104.0	104.3	112	184.7	16.5	340.5	267.7	288.3	1 414.6	5.9	151.9	124.1	106.4
4th qtr.	102.4	103.4	104.4	110	187.4	13.1	330.6	272.1	300.4	1 427.8	6.0	160.1	117.9	102.6
1978 1st qtr.	103.5	103.8	106.3	129	190.6	9.5	326.7	279.0	310.8	1 409.4	5.9	187.7	120.3	114.3
2nd qtr.	104.3 p	104.8 p	108.0		195.8	7.7	340.7	284.6		1 372.7	5.7	210.3	122.6	110.0
1977 Oct.	102.1	103.1	102.7	116	186.5	14.1	333.8	271.0	295.8	1 431.5	6.0	156.0	119.4	101.3
Nov.	102.0	102.7	103.1	108	187.4	13.0	329.9	272.0	300.5	1 429.6	6.0	159.4	115.3	98.4
Dec.	103.1	104.4	106.9	104	188.4	12.1	328.0	273.3	304.8	1 422.3	6.0	165.0	118.9	108.1
1978 Jan.	103.2	103.5	104.9	125	189.5	9.9	324.9	277.1	306.3	1 419.2	5.9	180.3	112.2	114.6
Feb.	103.7	103.7	106.8	120	190.6	9.5	324.2	279.2	311.2	1 409.0	5.9	187.0	127.4	111.3
Mar.	103.5	104.4	107.0	142	191.8	9.1	331.0	280.6	314.8	1 400.0	5.9	195.8	121.4	116.9
Apr.	105.4	105.8	106.7	132	194.6	7.9	337.4	282.7	325.7	1 387.1	5.8	203.7	125.9	104.1
May	103.3	103.6	108.4	124	195.7	7.7	341.5	284.7	327.2	1 366.4	5.7	209.9	119.9	114.1
June	104.2 p	105.0 p	108.6	133	197.2	7.4	343.1 p	286.3 p	333.8 p	1 364.7	5.7	217.4	121.9	111.9
July			110½ p		198.1	7.8	340.2 p	288.7 p		1 371.4	5.7	211.0	126.9 p	117.1 p
Aug										1 392.1 p	5.8	209.3		
% change latest 3 months														
on prev. 3 months	+0.8	+0.9	+2.2	+0.5	+2.4		+3.2	+2.0	+5.8	−0.6		+4.6	−1½	+3
on a year earlier	+2.2	+1.6	+5.6	+25.9	+7.6		−1.3	+9.1	+15.3	−1.1		+36.6	+2	+2½

p Provisional pe 2nd Preliminary e Estimate .. Not available [1] Average of available months

Inquiries: 01-215 3453

Overseas trade analysed in terms of industries: third and fourth quarters 1977

United Kingdom overseas trade for the third and fourth quarters 1977 is analysed in the table in terms of industries (as defined by the standard industrial classification), in contrast to the standard Overseas Trade Statistics classification.

Every commodity heading in the trade statistics has been reclassified according to the industry of which the commodity is the principal product.

This series of statistics, derived from the basic material of the Overseas Trade Statistics, was first presented in an article in the February 1975 issue of *Economic Trends*. The article discussed the uses and limitations of this alternative form of presenting trade together with figures for the years 1970 to 1973.

Business Monitor

In November 1975, the first Business Monitor on this subject (M 10) extended the series to the year 1974; in August 1976 the series was brought up to 1975; in September 1977 the series was brought up to 1976, showing the figures for that year and its four quarters; in April 1978 the series was brought up to the first and second quarters 1977.

Annual data for 1976 and provisional annual and quarterly data for 1977 will be published in a further Business Monitor on 8 September 1978 and will cover 132 separate industries (MLHs), grouped under 20 industrial orders; figures for the third and fourth quarters of 1977 are given in the summary table below.

Inquiries: 01-212 8815.

Rebased national accounts show increased growth

Newly compiled estimates of gross domestic product at 1975 factor cost show a growth in activity of nearly 5 per cent between 1975 and 1977, about 1½ per cent more than the most recently published estimates at 1970 prices. The new 1975-based estimates are shown as index numbers in the table below. For purposes of comparison the former estimates at 1970 prices (rescaled to 1975 = 100) are shown in brackets under the new estimates.

Gross domestic products at 1975 factor cost

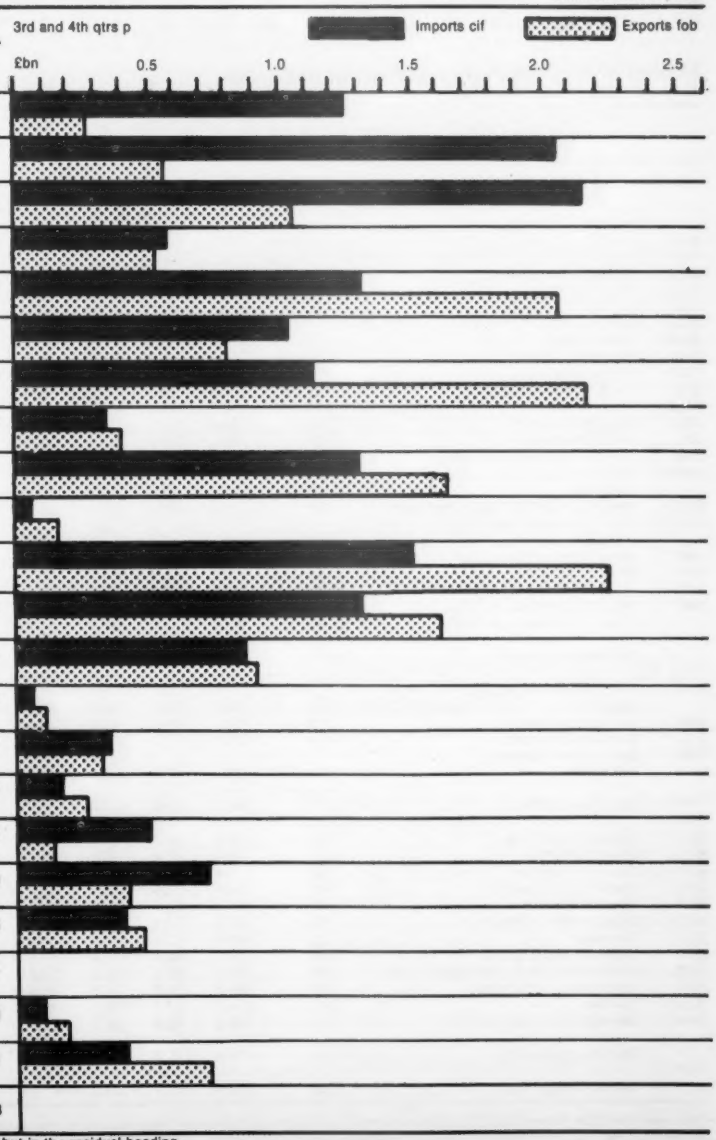
1975 = 100

	1973	1974	1975	1976	1977
Expenditure data	103.4	101.7	100	103.6	105.0
	(103.3)	(102.0)	(100)	(103.1)	(103.5)
Income data	103.0	100.7	100	103.0	104.7
	(103.2)	(100.8)	(100)	(102.5)	(103.8)
Output data	103.8	101.9	100	102.2	104.8
	(103.1)	(102.0)	(100)	(101.2)	(102.8)
Average estimate	103.4	101.4	100	102.9	104.8
	(103.3)	(101.7)	(100)	(102.3)	(103.4)

UK overseas trade analysed in terms of industries: 3rd and 4th quarters 1977

£ million current prices

SIC order no. and industry	3rd qtr p		4th qtr p	
	Imports cif	Exports fob	Imports cif	Exports fob
I Agriculture, forestry and fishing	645.3	103.4	631.8	164.0
II Mining and quarrying	1 073.0	347.2	1 002.3	m 243.7
III Food, drink and tobacco	1 121.5	514.9	1 074.1	552.0
IV Coal and petroleum products	268.2	291.9	314.7	242.6
V Chemicals and allied industries	684.7	1 065.2	616.3	1 002.5
VI Metal manufacture	529.9	426.6	514.8	412.5
VII Mechanical engineering	562.0	1 063.9	588.2	1 150.6
VIII Instrument engineering	180.0	186.0	192.1	213.2
IX Electrical engineering	634.5	766.6	655.6	808.1
X Shipbuilding and marine engineering	13.9	79.4	41.3	80.1
XI Vehicles	763.6	1 096.7	766.6	1 147.0
XII Metal goods not elsewhere specified	578.5	727.6	771.5	860.8
XIII Textiles	381.8	397.9	398.3	403.7
XIV Leather, leather goods and furs	48.3	48.0	43.2	54.4
XV Clothing and footwear	184.6	144.0	178.5	151.7
XVI Bricks, pottery, glass, cement, etc	79.4	126.8	70.1	138.2
XVII Timber, furniture, etc	285.4	61.9	246.9	64.3
XVIII Paper, printing and publishing	391.1	187.9	362.1	183.9
XIX Other manufacturing industries	170.3	210.9	174.6	212.5
XXI Gas and electricity	—	—	—	—
Miscellaneous [1]	37.6	71.3	59.7	74.9
Residual heading	191.1	531.1	206.3	305.1
Total UK trade	8 824.7	8 449.2	8 909.0	8 465.8



Imports and exports of certain restricted items are not included in industry totals but in the residual heading.

[1]The miscellaneous heading includes paintings, sculptures, antiques, stamps of philatelic interest, cinematograph film, photographic prints, etc. p Provisional.

Engineering industries: indices of production up to May

Output of the combined engineering industries for the period March to May was slightly higher than in the preceding three months, owing to 4 per cent rises in production of both electrical and instrument engineering. Mechanical engineering production was unchanged, failing to maintain the slight rate of growth shown since the fourth quarter of last year.

Within mechanical engineering, the increased output recorded by the majority of industries, including the heavy capital equipment industries in MLH 339, was offset by falls in six industries. Comparing March to May with the preceding three months, there was a sizable fall in output of textile machinery; the large drop in the series for office machinery was mostly, but not entirely due to the reclassification of three firms out of this industry into the computer industry, in January. The changes mentioned in the previous article (*Trade and Industry*, 28 July) have now been incorporated into the series for industrial plant and fabricated steelwork, revising the figures upwards from mid 1976. The latest figures for this industry suggest that output has fallen slightly, as do those for agricultural machinery, valves, and compressors and fluid power equipment.

The large increase in production of photographic and document copying equipment was reinforced by rising output of the important scientific and industrial instruments industry, whilst the other two industries in the instrument engineering sector showed little change.

Output of all industries in electrical engineering was steady or rising between December to February and March to May with the possible exception of the telecommunications industry, for which the latest reliable information up to April indicates a small decrease. The consumer industries, records and tapes and broadcasting receiving and sound reproducing equipment, showed sizeable increases, and domestic electrical appliances a smaller one, possibly reflecting the upturn in consumer spending. The other notable rise was in output of the battery industry which manufactures partly for domestic but mainly for industrial demand.

Rebasing of the index of production

Next month these series, along with the aggregate index of production and other main economic indices, will be rebased onto 1975 = 100. The series for the three main sectors and for combined engineering will appear as usual in the regular index of production article in this magazine, as well as in the 'Monthly digest of statistics'. However, publication of this article will be suspended next month pending thorough checking of the series for the separate industries.

Inquiries: On the article and the statistics: Mr I. P. Tutt, Branch EcS3A, Department of Industry, Room 618, Dean Bradley House, 52 Horseferry Road, London SW1P 2AG, tel. 01-212 5770. Requests for quarterly indices for past years: Mr P. Coulson, Branch 5, Central Statistical Office, Great George Street, London SW1P 3AG, tel. 01-233 7239.

Indices of production for engineering industries

Seasonally adjusted volume indices

MLH		1970 = 100 Weight (percentage)	1975	1976 p	1977 p	1976 3rd qtr p	1976 4th qtr p	1977 1st qtr p	1977 2nd qtr p	1977 3rd qtr p	1977 4th qtr p	1978 1st qtr p	1978 Mar-May av.[1]	per cent change Mar-May average on previous 3 months
3310	Agricultural machinery	1.05	113.7	108.9	104.7	106.8	116.5	113.2	96.0	103.3	106.2	102.0	101.3	−2
3320	Machine tools	4.01	73.6	60.8	59.3	57.9	61.0	59.9	58.2	58.9	60.2	59.6	61.3	+3
3331	Pumps	1.02	123.6	132.8	138.8	131.7	136.5	139.0	140.7	136.9	138.5	145.0	150.9	+6
3332	Valves	1.49	106.6	98.8	101.2	96.6	106.2	106.3	92.8	107.6	98.1	98.2	96.5	−2
3333/4	Compressors	1.85	109.0	103.7	111.0	101.1	106.1	108.7	106.1	110.7	118.3	118.1	115.4	−3
3340	Industrial engines	1.61	125.6	127.2	134.7	121.6	121.1	140.0	133.9	131.1	133.7	131.5	132.3	–
3350	Textile machinery	2.25	111.7	75.2	51.5	68.8	64.9	55.3	46.6	47.0	56.9	44.1	39.3	−20
3360	Construction equipment	2.82	127.8	125.7	128.0	124.1	123.4	143.4	123.7	123.9	121.1	117.8	118.6	–
3370	Mechanical handling equipment	3.47	116.2	104.6	104.1	104.1	104.5	109.7	105.6	105.8	95.2	100.2	102.5	+5
3380	Office machinery	2.03	103.6	103.2	108.1	100.1	113.6	108.6	103.6	106.8	113.4	78.0	72.8	−19
3391	Mining machinery	1.04	169.2	158.5	147.5	154.8	150.1	135.7	145.7	144.4	164.3	178.4	183.1	+5
3392	Printing and paper machinery	1.02	83.9	76.0	75.6	81.2	73.4	77.7	76.2	74.4	74.0	80.0	84.9[2]	+13[2]
3393/4	Refrigerating and space-heating machinery	2.32	99.2	93.4	92.1	93.8	95.0	96.9	93.0	90.7	87.9	96.5	97.1	+4
3395/6	Weighing machinery and power tools	1.08	102.8	102.0	104.1	112.6	100.0	102.8	105.3	99.9	108.3	131.3	132.2[2]	+13[2]
3397/8	Food processing machinery: packaging machinery	1.53	129.4	123.1	114.1	125.4	110.0	116.4	114.9	122.7	102.2	111.1	109.2[2]	+4[2]
3399	Other non-electrical machinery	4.99	84.8	80.9	81.6	77.2	77.5	93.5	79.4	74.8	78.8	88.1	86.3	+1
3414	Constructional steelwork	3.11	120.5	106.9	92.4	105.9	102.2	96.3	89.9	91.8	91.5	88.9	91.8	+3
3415	Industrial plant and fabricated steelwork	7.92	88.0	87.8	86.5	90.4	83.6	87.2	87.3	89.3	82.2	84.8	80.6	−5
3491	Ball, roller and plain bearings	3.17	109.9	107.8	105.1	107.8	111.1	109.3	105.6	103.1	102.3	102.0	103.0	+1
	Other mechanical engineering	7.40	105.0	96.8	94.8	94.4	95.2	97.1	97.8	95.1	89.4	96.9	98.6	+4
	Mechanical engineering	55.16	104.2	97.5	95.4	96.4	95.9	99.2	94.6	94.7	93.2	95.0	94.7	–
3510	Photographic and copying equipment	0.80	96.1	94.4	94.9	89.2	105.6	93.3	97.1	98.2	91.0	120.5	127.9	+15
3520	Watches and clocks	0.53	144.7	129.3	126.3	129.9	134.6	119.8	116.5	138.6	130.3	124.1	126.4	+1
3530	Surgical instruments	1.18	136.7	122.4	119.1	119.1	123.8	121.8	117.4	118.5	118.8	119.6	118.7	−1
3540	Scientific and industrial instruments	5.69	115.6	112.6	116.7	110.7	117.2	114.3	118.2	115.5	118.9	116.3	120.6	+3
	Instrument engineering	8.19	118.5	113.3	115.5	111.0	118.1	113.7	115.9	115.7	116.9	117.7	121.4	+4
3610	Electrical machinery	7.25	97.9	95.2	99.7	95.5	95.2	98.9	98.6	101.9	99.4	107.9	108.6	+4
3620	Wires and cables	2.91	93.5	95.4	98.8	95.5	100.8	103.0	97.3	100.4	94.4	94.2	96.1	+3
3630	Telecommunications	3.28	114.4	100.4	83.5	96.8	89.1	83.7	81.5	86.0	82.8	76.6	77.9[2]	−2[2]
3640	Electronic components	5.48	111.7	113.5	126.3	112.9	122.8	125.8	127.3	124.3	127.8	131.0	131.6[2]	+2[2]
3651	Records and tapes	0.42	197.4	188.8	194.4	185.3	183.0	216.8	196.5	172.4	192.0	209.2	239.4	+19
3652	Broadcasting equipment	2.75	168.5	156.5	150.6	165.0	175.1	146.8	134.5	162.9	158.0	153.5	164.9	+8
3660	Computers	1.43	158.8	168.1	198.0	169.0	177.0	178.4	186.0	224.6	203.0	215.8	209.2	–
3670	Electronic capital goods	4.30	97.1	101.4	112.4	102.1	104.4	110.7	109.8	111.9	117.2	117.1	117.9	–
3680	Domestic electrical appliances	2.99	134.4	123.1	124.3	129.8	132.0	137.5	113.0	125.9	120.7	120.7	124.3	+4
3691	Electric parts for vehicles	1.90	95.8	96.7	91.5	95.0	95.6	96.8	100.4	77.3	91.7	103.1	101.1	–
3692/3	Batteries	1.46	117.2	117.7	115.8	115.0	109.1	122.3	105.8	116.8	118.3	122.2	130.3	+9
3694	Lamps and other electrical	2.50	97.2	93.4	96.2	93.5	94.5	97.9	96.7	95.9	94.3	106.0	107.8	+6
	Electrical engineering	36.65	113.4	110.8	114.4	111.5	114.0	115.2	111.2	115.9	115.1	118.6	121.0	+4
	Combined engineering	100.00	108.7	103.7	104.0	103.1	104.4	106.2	102.4	104.2	103.2	105.5	106.5	+2

[1] Averages if for other than a calendar quarter should not be compared with those in the preceding column; the estimates are not independent and are subject to erratic variation and later revisions. Comparisons with earlier quarters provide more reliable guides to recent trends. [2] The figure shown is the average for February to April, and the percentage change is that average on the average for the preceding three months. Later figures not available owing to insufficient response. p Provisional.

Machine tools' sales increase in recent months

Metal-working machine tool sales and orders in May

Current value of machine tool sales increased further in the three months to May and allowing for inflation and seasonal changes, overall activity has almost certainly risen in recent months. There remains, however, a wide variation between firms. Employment slipped again to 51 400 in May, perhaps reflecting the rather gloomy new order situation shown by the latest figures. The home market continues to be more buoyant than exports.

Recent trends

The provisional estimate for May 1978, together with the revised estimates for March and April, shows that sales of machine tools by UK manufacturers rose by 10 per cent in current value terms over the level in the previous three months and by 25 per cent over a year earlier. These increases include components due to price movements and seasonal changes. After making an allowance for these the volume of sales was almost certainly higher than the level both in the previous three months and a year earlier. Export sales rose slightly faster than sales to the UK market in the latest three months, but remain at a much lower level.

The overall intake of new orders (net of cancellations) in the three months to May was almost the same as in the previous three months and only 1 per cent higher than a year earlier. Total new orders were valued at £121 million in the three months to April, which only exceeded the level of sales in the same period by 1 per cent. Orders-on-hand were therefore virtually unchanged. An increase of 2 per cent in new orders from the home market to £85 million was offset by a further fall, of 3 per cent, in new orders from abroad to £35 million. Compared with a year earlier home new orders were 8 per cent up, while new export business was 12 per cent down. In volume terms total new orders probably fell slightly in the latest three months compared with the previous three months and were significantly lower than in the same period a year earlier.

Table 1 **Metal-working machine tools: orders and sales** £ million current values

	Sales			Orders on hand [1]			Net new orders		
	Total	Home	Export	Total	Home	Export	Total	Home	Export
1972	184.7	111.6	73.1	113.3	55.7	57.6	192.0	121.3	70.7
1973	213.2	129.1	84.1	216.0	120.4	95.6	315.9	193.8	122.1
1974	254.4	149.9	104.5	312.9	164.1	148.8	347.9	191.9	156.0
1975	325.4	186.4	139.0	229.8	117.6	112.2	246.8	144.7	102.1
1976	352.0	208.6	143.4	193.5	100.9	92.6	315.7	191.9	123.8
1977	395.2	245.4	149.8	260.6	158.8	101.8	462.3	303.3	159.0
1976									
2nd qtr	81.1	46.9	34.2	190.6	101.9	88.7	76.4	48.6	27.8
3rd	76.0	47.0	29.0	203.9	109.8	94.1	89.3	54.9	34.4
4th	100.1	63.4	36.7	193.5	100.9	92.6	89.7	54.5	35.2
1977									
1st qtr	99.5	61.7	37.8	221.2	109.8	111.4	127.2	70.6	56.6
2nd	90.8	57.2	33.6	252.6	139.8	112.8	122.2	87.2	35.0
3rd	97.2	60.7	36.5	260.1	150.0	110.1	104.7	70.9	33.8
4th	107.7	65.8	41.9	260.6	158.8	101.8	108.2	74.6	33.6
1978									
1st qtr	119.7	76.1	43.6	260.4	166.0	94.4	119.5	83.3	36.2
1977									
March	36.5	23.8	12.7	221.2	109.8	111.4	42.4	23.1	19.3
April	27.3	17.4	9.9	227.0	115.2	111.8	33.1	22.8	10.3
May	32.4	20.2	12.2	238.4	128.0	110.4	43.8	33.0	10.8
June	31.1	19.6	11.5	252.6	139.8	112.8	45.3	31.4	13.9
July	28.3	18.9	9.4	256.3	145.8	110.5	32.0	24.9	7.1
August	31.8	20.9	10.9	259.2	146.9	112.3	34.7	22.0	12.7
September	37.1	20.9	16.2	260.1	150.0	110.1	38.0	24.0	14.0
October	34.3	19.9	14.4	252.7	150.2	102.5	26.9	20.1	6.8
November	36.4	21.8	14.6	257.8	155.3	102.5	41.5	26.9	14.6
December	37.0	24.1	12.9	260.6	158.8	101.8	39.8	27.6	12.2
1978									
January	34.3	21.6	12.7	263.3	163.5	99.8	37.0	26.3	10.7
February r	38.0	24.4	13.6	268.8	168.9	99.9	43.5	29.8	13.7
March r	47.4	30.1	17.3	260.4	166.0	94.4	39.0	27.2	11.8
April r	30.4	18.5	11.9	275.2	181.0	94.2	45.2	33.5	11.7
May p	42.1	26.6	15.5	269.6	179.0	90.6	36.5	24.6	11.9
Three monthly totals:									
March-May 1978	119.9	75.2	44.7	269.6	179.0	90.6	120.7	85.3	35.4
Dec-Feb 1977	109.3	70.1	39.2	268.8	168.9	99.9	120.3	83.7	36.6
March-May 1977	96.2	61.4	34.8	238.4	128.0	110.4	119.3	78.9	40.4
Percentage change latest three months on:									
1 Previous three months	+10	+7	+14	—	+6	−9	—	+2	−3
2 A year earlier	+25	+22	+28	+13	+40	−18	+1	+28	−12

[1] The values for orders outstanding relate to the ends of the periods shown. p Provisional. r Revised.

Overall order books stood at £270 million at the end of May 1978; virtually unchanged compared with February and 13 per cent higher than a year earlier. Home order books continued to lengthen, standing at £179 million at the end of May, 40 per cent higher than a year earlier. Export orders-on-hand, however, stood at £91 million at the end of May having fallen by 18 per cent since May 1977. Allowing for inflation the fall would be even greater.

In terms of current activity the overall order book is sufficient to maintain the industry until the end of the year.

Employment

Recent movements in the employment estimates indicate that employment has fallen back slightly in 1978, having risen throughout 1977. Further redundancies are known to be under discussion and it seems that the upward trend may have been halted.

Adjustment of estimates

The monthly estimates up to and including March 1978 have been adjusted to be consistent with the more comprehensive quarterly inquiry recently published and the latest provisional estimates will be revised when the appropriate information becomes available. Net new orders and orders-on-hand have been adjusted to the same basis of coverage and valuation as sales.

The monthly statistics will be published in Business Monitor PM 332 and full details of the quarterly inquiry can be found in the Business Monitor PQ 332.

Inquiries on the published series should be addressed to the Department of Industry, Mechanical Engineering Statistics, Room 605, Dean Bradley House, Horseferry Road, London SW1P 2AG. tel. 01-212 0687.

Table 2 **Metal-working machine tools: employment estimates** Thousands

1976		**1977**		**1977**	
1st qtr	51.2	1st qtr	51.0	Nov	52.1
2nd	50.3	2nd	51.0	Dec	52.2
3rd	50.8	3rd	51.6		
4th	50.9	4th	52.2	**1978**	
				Jan	51.8
		1978		Feb	51.7
		1st qtr	51.7	Mar	51.6
				Apr	51.5
				May p	51.4

r Revised. p Provisional.

Consumers' expenditure in second quarter

Second preliminary estimate of consumers' expenditure in the second quarter is £9,100 million (revalued at 1970 prices and seasonally adjusted). This is £15 million lower than the first estimate issued on 20 July. The revised figure is only a little higher than the estimate for the first quarter of 1978.

It is estimated that between the first and second quarters of 1978 there were rises in most areas of retail sales and expenditure on 'other services' also rose slightly. But personal expenditure on cars and motor-cycles in now shown to have fallen slightly in the second quarter, and expenditure on food, alcoholic drink and tobacco fell back from the high level of the first quarter.

Capital expenditure of the manufacturing, distributive and service industries: second quarter

Rebasing on 1975 prices

As part of the rebasing of the United Kingdom's national accounts, figures are now given in terms of 1975 prices. On this basis, provisional estimates for the second quarter of 1978 indicate increases on the first quarter for both the manufacturing and the distributive and service (excluding shipping) industries; the increase for manufacturing suggests a resumption of the upward trend which was checked in the first quarter of 1978.

Manufacturing industry

Capital expenditure by manufacturing industry in the second quarter, at 1975 prices, seasonally adjusted, is provisionally estimated at nearly £980 million, an increase of 6 per cent over the first quarter which was itself depressed. As this series can be somewhat erratic, a better guide to trends is given by considering the first two quarters of 1978 together. During that period the volume of investment was 3 per cent above the previous two quarters and 10 per cent above the first two quarters of 1977.

In the second quarter, increases in the volume of expenditure were recorded for all three assets although, on a longer term comparison, investment in vehicles was slightly lower in the first half of 1978 than in either half of 1977.

Distributive and service industries (excluding shipping)

The provisional estimate of the capital expenditure of the distributive and service industries (excluding shipping) in the second quarter of 1978 is about £1,172 million, at 1975 prices, seasonally adjusted, about £3 million higher than the outcome for the previous quarter. In the first half of 1978, investment by these industries was about 13 per cent greater than in the first half of 1977, and about 4 per cent higher than in the second half. Compared with the result for the second half of 1977, investment in new building work in the first half of 1978 was about 3 per cent lower, while expenditure on vehicles was 8 per cent higher, and on plant and machinery, 7 per cent higher.

Shipping industry

The quarterly estimates of investment by the shipping industry continue to fluctuate and the provisional estimate for expenditure in the second quarter is about £39 million, at 1975 prices, seasonally adjusted, much below the result for the first quarter.

Revisions to the series

All government economic statistics are being rebased from 1970 to 1975 prices and capital expenditure figures for the manufacturing, distributive and service industries are now given on this basis for the first time. In addition, results of the latest large-scale annual surveys have, as usual, been used to update the quarterly figures, which are based on smaller sample surveys. No annual inquiry results are yet available for 1977 but, as well as being adjusted to reflect the change in the 1976 estimates, figures for that year have been revised to take account of returns and amendments received too late for the original quarterly calculations. Seasonal adjustment factors have been recalculated to include the effects of the 1977 pattern and the revisions to date for earlier years.

Note

The estimation of changes in the volume of capital expenditure (as distinct from changes at current prices) is subject to greater error when the rate of price increases is varying and this should be borne in mind in using the figures.

Inquiries: Manufacturing industry 01-215 3175/3176, distributive and service industries 01-215 5998.

Table 1 **Fixed capital expenditure at 1975 prices seasonally adjusted of manufacturing, distributive and service industries**

£ million

		Analysis by industrial sectors			Analysis by type of asset		
Period	Total	Manufacturing industries	Distributive and service industries (excluding shipping)	Shipping industry	New building work	Vehicles	Plant and machinery
1966	6 523	3 497	2 825	201	2 434	1 075	3 015
1967	6 680	3 412	2 985	283	2 439	1 150	3 091
1968	7 386 (7 232)[1]	3 642 (3 549)	3 262 (3 251)[1]	483 (433)[1]	2 510	1 431 (1 381)[1]	3 446 (3 342)[1]
1969	7 763 (7 917)[1]	3 898 (3 991)	3 478 (3 489)[1]	387 (437)[1]	2 716	1 386 (1 436)[1]	3 661 (3 765)[1]
1970	8 470	4 196	3 669	605	2 766	1 603	4 101
1971	8 413	3 923	3 888	602	2 870	1 546	3 997
1972	8 249	3 398	4 055	796	2 585	1 891	3 774
1973	8 997	3 504	4 674	818	2 740	2 097	4 160
1974	9 112	3 822	4 605	685	2 656	2 010	4 446
1975	7 929	3 522	3 841	565	2 158	1 590	4 181
1976	7 601	3 345	3 926	329	1 993	1 552	4 056
1977	8 296	3 573	4 325	398	1 998	1 768	4 530
1972							
1st qtr	2 047	901	965	181	653	431	963
2nd	2 069	841	1 016	211	650	478	941
3rd	2 024	829	1 015	180	632	466	926
4th	2 110	827	1 059	224	650	516	944
1973							
1st qtr	2 304	878	1 167	259	708	571	1 026
2nd	2 168	845	1 157	166	683	471	1 015
3rd	2 224	912	1 158	154	697	483	1 044
4th	2 300	869	1 192	239	652	573	1 076
1974							
1st qtr	2 300	951	1 224	124	713	468	1 119
2nd	2 269	948	1 160	161	668	494	1 107
3rd	2 267	948	1 117	202	651	529	1 086
4th	2 276	975	1 104	197	625	518	1 133
1975							
1st qtr	2 076	942	967	167	572	438	1 065
2nd	2 027	901	967	159	562	405	1 061
3rd	1 957	850	967	140	526	385	1 047
4th	1 868	830	940	99	498	362	1 008
1976							
1st qtr	1 840	813	936	92	508	367	965
2nd	1 854	828	972	54	496	362	996
3rd	1 975	849	1 005	121	498	442	1 035
4th	1 932	856	1 014	62	491	380	1 061
1977							
1st qtr	1 988	851	1 030	107	476	437	1 075
2nd	2 024	879	1 044	101	470	445	1 109
3rd	2 111	910	1 103	98	516	451	1 144
4th	2 174	932	1 149	93	535	436	1 203
1978							
1st qtr	2 156	920	1 169	68	503	438	1 215
2nd	2 190	979	1 172	39	527	410	1 253

The figures given above cover a wide sector of the economy, accounting – after exclusion of dwellings – for some 48 per cent of all UK gross domestic fixed capital formation in 1976. The scope of manufacturing and the distributive and service industries is defined in the notes at the end of the article, and falls very largely in the private sector of the economy, although some public sector elements are included as appropriate (notably the British Steel Corporation, in manufacturing industry). Exploration and development work in the North Sea (order II is excluded.)

[1] After allowing for expenditure, brought forward into 1968 and 1969 to secure the higher rate of investment grants which ended on 31 December 1968: estimated at £93 million for manufacturing industry. £11 million for distributive and service industries, and £50 million for shipping. The estimate for shipping is particularly uncertain because of the erratic nature of this industry's capital expenditure, while that for the distributive and service industries is uncertain because of the smallness of the effect.

Notes to tables

Capital expenditure comprises expenditure on vehicles (including ships) and plant and machinery less receipts from sales of these assets, and on new building work.

The analysis by industry group follows the standard industrial classification revised 1968 edition:

Manufacturing orders III to XIX

Distributive trades order XXIII

Wholesale MLH 810, 811, 812, 831, 832 (except leasing by finance houses and similar businesses)

Retail MLH 820, 821

Other industries order XX (construction): XXII (transport and communication) excluding 701 – railways, 706 – port and inland water transport, 707 – air transport and 708 – postal services and telecommunications: XXIV (insurance, banking, finance and business services) including leasing by finance houses and similar businesses and excluding Trustee Savings Banks; XXV (professional and scientific services) excluding 872 – educational services and 874 – medical and dental services; and XXVI (miscellaneous services).

SIC orders I (agriculture, forestry and fishing), II (mining and quarrying), XXI (gas, electricity and water), and XXVI (public administration and defence) are completely excluded.

The estimates with the exception of those for manufacturing industry in table 2, are shown to the nearest £m but should not be regarded as accurate to this degree and care should be taken in using the industry figures in tables 2 and 3, because of the margin of error involved in the quarterly seasonal adjustments. Also, there may be an apparent discrepancy between the total and the sum of the constituent parts due to rounding.

See also footnotes to table 1.

Table 2 Fixed capital expenditure of manufacturing industry at 1975 prices seasonally adjusted

£ million

Period	Analysis by industry group: Total all manufacturing industries	Food, drink and tobacco: Food	Drink and tobacco	Coal and petroleum products	Chemicals	Iron and steel	Non-ferrous metals	Engineering, shipbuilding and metal goods: Instrument and electrical engineering	Other engineering	Vehicles	Textiles leather and clothing	Paper, printing and publishing	Other manufacturing industries	Analysis by type of asset: New building work	Vehicles	Plant and machinery
1970	4 196.4	503.8		176.5	785.6	318.1	200.0	807.5		434.2	314.3	262.8	393.6	1 000.2	222.0	2 974.2
1971	3 922.5	505.3		251.9	683.6	467.6	131.8	708.9		274.9	265.0	214.7	418.8	905.2	222.0	2 795.3
1972	3 397.8	519.4		214.9	492.2	439.7	77.3	640.8		179.2	217.0	194.3	423.0	738.0	239.4	2 420.4
1973	3 504.1	297.4	269.6	86.1	389.3	347.1	63.3	263.7	508.9	259.3	314.5	225.6	479.3	738.7	260.1	2 505.3
1974	3 822.0	318.8	254.4	92.6	440.1	416.0	78.3	299.4	553.7	315.9	336.7	249.0	467.1	727.1	273.6	2 821.3
1975	3 521.9	285.1	181.0	111.3	545.5	513.2	77.7	258.3	501.9	269.8	233.4	210.8	333.9	639.9	199.9	2 682.1
1976	3 345.3	268.9	168.3	90.1	556.0	585.2	51.2	254.0	468.1	247.9	170.9	177.9	306.8	513.9	239.7	2 591.7
1977	3 572.6	360.5	217.3	75.4	622.3	451.1	61.0	304.8	502.6	287.2	150.8	173.3	366.3	547.1	285.8	2 739.7
1973																
1st qtr	878.0	80.3	70.2	38.1	101.9	97.7	15.7	63.2	113.2	59.4	70.8	57.4	110.1	179.1	66.2	632.7
2nd	845.3	67.9	61.6	38.7	99.9	63.3	13.8	66.9	125.6	61.5	71.6	55.7	118.8	178.8	61.9	604.6
3rd	911.7	71.6	65.8	30.2	94.1	97.6	16.8	64.6	135.8	68.2	85.8	56.3	124.9	192.2	66.0	653.5
4th	869.1	77.6	72.0	−20.9	93.4	88.5	17.0	69.0	134.3	70.2	86.3	56.2	125.5	188.6	66.0	614.5
1974																
1st qtr	951.1	84.3	68.3	21.0	100.6	89.1	18.2	71.5	144.7	79.2	86.6	58.3	129.3	191.6	68.4	691.1
2nd	948.3	76.5	71.3	20.8	103.1	97.4	21.2	73.8	134.0	79.9	87.2	63.7	119.4	182.1	69.2	697.0
3rd	947.5	80.5	61.9	23.6	108.4	95.9	19.4	76.6	138.4	81.1	85.3	62.9	113.5	174.8	69.8	702.9
4th	975.1	77.5	52.9	27.2	128.0	133.6	19.5	77.5	136.6	75.7	77.6	64.1	104.9	178.6	66.2	730.3
1975																
1st qtr	941.7	76.5	50.5	27.4	140.2	111.7	30.4	71.9	136.1	75.5	67.5	58.5	95.5	176.7	54.3	710.7
2nd	900.8	72.9	46.7	30.1	140.7	123.6	15.0	67.3	133.8	70.5	59.4	53.0	87.8	167.6	47.5	685.7
3rd	849.9	69.0	34.7	32.5	138.3	135.5	16.6	58.4	122.6	61.3	53.8	52.7	74.5	155.9	47.8	646.2
4th	829.5	66.7	49.1	21.3	126.3	142.4	15.7	60.7	109.4	62.5	52.7	46.6	76.1	139.7	50.3	639.5
1976																
1st qtr	813.0	63.6	38.3	27.8	125.7	154.6	14.0	63.3	109.3	52.5	47.6	46.3	70.0	135.0	53.6	624.4
2nd	827.8	64.3	35.9	22.5	137.0	155.7	12.0	60.0	116.3	62.7	43.4	45.9	72.1	126.3	60.7	640.8
3rd	848.7	69.9	47.2	19.8	144.9	147.6	12.0	63.5	114.5	63.9	41.0	43.5	80.9	126.9	62.3	659.5
4th	855.8	71.1	46.9	20.0	148.4	127.3	13.2	67.2	128.0	68.8	38.9	42.2	83.8	125.7	63.1	667.0
1977																
1st qtr	851.2	81.8	52.1	15.5	142.0	124.9	12.6	69.3	119.6	64.2	39.2	42.2	87.8	128.2	70.0	653.0
2nd	879.1	92.4	57.5	18.8	150.8	111.4	14.8	73.4	125.1	64.2	38.3	42.3	90.1	134.4	75.5	669.2
3rd	910.2	94.1	58.0	18.0	163.3	102.1	17.0	83.2	128.8	74.4	35.7	44.6	91.0	139.3	69.2	701.7
4th	932.1	92.2	49.7	23.1	166.2	112.7	16.6	78.9	129.1	84.4	37.6	44.2	97.4	145.2	71.1	715.8
1978																
1st qtr	920.1	89.3	71.4	22.4	171.4	85.2	15.2	88.4	128.8	78.6	35.3	48.9	85.2	140.9	68.7	710.5
2nd	978.7													146.3	71.1	761.3

[1] These columns represent the division of the columns 'food, drink and tobacco, engineering, shipbuilding and metal goods', formerly shown. This split is not available for years 1970 to 1972.

Table 3 Fixed capital expenditure in the distributive and service industries (excluding shipping) at 1975 prices seasonally adjusted

£ million

Period	Total	Analysis by industry group: Wholesale distribution	Retail distribution	Other industries [2]	Analysis by type of asset: New building work	Vehicles	Plant and machinery
1968	3 262 (3 251) [1]	345	539	2 377 (2 366) [1]	1 640	751	870 (859) [1]
1969	3 478 (3 489) [1]	332	552	2 594 (2 605) [1]	1 710	794	974 (985) [1]
1970	3 669	365	547	2 757	1 752	803	1 114
1971	3 888	384	582	2 923	1 959	743	1 187
1972	4 055	405	685	2 966	1 841	893	1 322
1973	4 674	396	790	3 488	1 997	1 034	1 644
1974	4 605	438	778	3 390	1 922	1 064	1 620
1975	3 841	362	672	2 808	1 509	838	1 494
1976	3 926	337	666	2 923	1 469	1 002	1 455
1977	4 325	370	750	3 205	1 437	1 101	1 787
1972							
1st qtr	965	100	158	708	452	209	305
2nd	1 016	102	164	750	461	220	336
3rd	1 015	94	176	745	446	230	339
4th	1 059	109	187	763	482	234	343
1973							
1st qtr	1 167	103	192	872	527	250	390
2nd	1 157	98	197	862	504	245	409
3rd	1 158	95	206	858	504	268	386
4th	1 192	100	196	896	462	271	459
1974							
1st qtr	1 224	118	190	917	520	278	426
2nd	1 160	107	192	861	484	267	408
3rd	1 117	112	186	819	475	260	382
4th	1 104	101	211	793	443	258	403
1975							
1st qtr	967	98	158	711	394	221	353
2nd	967	92	167	708	392	201	374
3rd	967	87	171	709	367	201	399
4th	940	85	175	680	357	215	368
1976							
1st qtr	936	82	164	689	371	227	338
2nd	972	83	182	706	367	252	353
3rd	1 005	86	160	759	369	263	372
4th	1 014	86	160	769	361	261	392
1977							
1st qtr	1 030	81	184	765	347	263	420
2nd	1 044	92	183	769	332	274	439
3rd	1 103	97	197	809	374	287	442
4th	1 149	101	186	862	385	277	487
1978							
1st qtr	1 169	90	201	878	361	304	504
2nd	1 172				379	304	490

[1] See footnote to table 1. [2] Including leasing, on the basis of the ownership of assets.

Table 4 Fixed capital expenditure at current prices of manufacturing, distributive and service industries

£ million

Period	Total	Manufacturing industry	Distributive and service industries (excluding shipping)	Shipping industry
1966	2 787	1 517	1 172	99
1967	2 861	1 485	1 236	140
1968	3 304	1 639	1 418	247
1969	3 629	1 822	1 589	217
1970	4 294	2 130	1 799	364
1971	4 648	2 187	2 078	384
1972	4 971	2 044	2 373	553
1973	6 071	2 347	3 090	635
1974	7 360	3 067	3 682	611
1975	7 929	3 522	3 841	565
1976	8 841	3 958	4 497	386
1977	11 033	4 862	5 611	560
1973				
1st qtr	1 455	555	734	166
2nd	1 378	521	738	118
3rd	1 464	612	743	109
4th	1 775	659	875	242
1974				
1st qtr	1 673	693	890	90
2nd	1 684	688	871	125
3rd	1 848	776	899	173
4th	2 155	910	1 022	223
1975				
1st qtr	1 895	860	893	142
2nd	1 890	832	920	138
3rd	1 989	869	972	148
4th	2 155	961	1 056	138
1976				
1st qtr	2 034	918	1 020	96
2nd	1 999	893	1 053	53
3rd	2 274	997	1 130	146
4th	2 534	1 150	1 293	92
1977				
1st qtr	2 491	1 106	1 263	122
2nd	2 498	1 101	1 284	114
3rd	2 792	1 233	1 414	145
4th	3 251	1 421	1 651	180
1978				
1st qtr	3 018	1 322	1 584	112
2nd	3 030	1 381	1 584	65

Manufacturers' and distributors' stocks: provisional, second quarter

Rebasing on 1975 prices

As part of the rebasing of the United Kingdom national accounts, figures are now given in terms of 1975 prices. On this basis, provisional estimates for the second quarter of 1978 are that the volume of stocks held by manufacturers, wholesalers and retailers rose by about £280 million, seasonally adjusted.

Manufacturing industry

It is provisionally estimated that stocks rose by £190 million at 1975 prices, seasonally adjusted, in the second quarter of 1978. Stocks of finished goods are estimated to have increased by about £130 million and work in progress by £60 million, with little change in stocks of materials and fuel. The latest increase in finished goods continues the build-up which began in the fourth quarter of 1976. Work in progress has now increased for three quarters in succession but materials and fuel stocks had been falling for a year prior to the second quarter. It has of course to be remembered that provisional estimates of stocks changes are subject to considerable revision and although the second quarter's increase is high it is less than 1 per cent of the opening level.

The stocks/output ratio cannot be calculated at present as the index of manufacturing production is not yet available on a 1975 price base, therefore table 5 is not published on this occasion.

Distributive industries

On the basis of provisional estimates, wholesalers' stocks decreased in the second quarter of 1978 by about £15 million, at 1975 prices, seasonally adjusted. A reduction in stocks held by dealers in industrial materials and machinery, and general wholesale dealers was partly offset by increases in the stocks held by dealers in coal, builders merchants etc. Retailers' stocks rose by some £100 million, at 1975 prices, seasonally adjusted, during the second quarter.

Revisions to the series

All government economic statistics are being rebased from 1970 to 1975 prices and stocks figures for the manufacturing and distributive industries are now given on this basis for the first time. In addition, results of the latest large-scale annual inquiries have, as usual, been used to update the quarterly figures, which are based on smaller sample surveys. Annual inquiry results for 1976 have been used only for wholesaling and they are not available for 1977 for any industries. However, figures for these years have been adjusted to reflect the changes in earlier estimates; figures for 1977 have also been revised to take account of returns and amendments received too late for the original quarterly calculations. Seasonal adjustment factors have been recalculated to include the effects of the 1977 pattern and the revisions to data for earlier years.

Note

The estimation of physical changes in stocks is subject to greater error when the rate of price increases is varying, and this should be borne in mind when using the figures.

Table 1 Value of physical increase in industry's stocks at 1975 prices seasonally adjusted

£ million

	Total	Manufacturing	Wholesaling	Retailing
Level of stocks at end 1977	27 982	20 261	4 540	3 181
1973	2 392	1 336	432	624
1974	1 469	1 288	361	−180
1975	−1 570	−1 221	−249	−100
1976	460	316	131	13
1977	737	442	266	29
1973				
1st qtr	729	465	115	149
2nd	688	303	74	311
3rd	496	307	119	70
4th	478	261	123	94
1974				
1st qtr	−130	−173	87	−44
2nd	774	566	156	52
3rd	736	782	62	−108
4th	89	113	56	−80
1975				
1st qtr	−359	−206	−84	−69
2nd	−470	−255	−107	−108
3rd	−517	−498	−45	26
4th	−224	−262	−13	51
1976				
1st qtr	117	23	43	51
2nd	−144	−46	−10	−88
3rd	191	83	81	27
4th	295	255	17	23
1977				
1st qtr	511	267	82	162
2nd	240	79	179	−18
3rd	−174	−18	−80	−76
4th	161	115	85	−39
1978				
1st qtr	266	71	81	114
2nd p	278	191	−15	102

Economic indicators of the industrial countries

Due to pressure of space, the quarterly analysis of the economic indicators of industrial countries has had to be held over until next week.
Inquiries: 01-215 3126.

Notes to tables 1 to 4

1 The analysis by industry group follows the standard industrial classification (1968 edition):
Manufacturing orders III to XIX.
Distributive trades order XXII:
Wholesale MLH 810, 811, 812, 831, 832 (except leasing by finance houses)
Retail MLH 820, 821.
2 Book values exclude VAT. Purchase tax payable on retailer's stock prior to the second quarter of 1973.
3 The estimates are shown to the nearest £ million but should not be regarded as accurate to this degree and care should be taken in using the industry figures in tables 2 and 3 because of the margin of error involved in quarterly seasonal adjustments. Differences between totals and the sum of constituent parts are due to rounding.
r Revised. p Provisional.

Table 2 Value of the physical increase of stocks held by manufacturing industry at 1975 prices seasonally adjusted

£ million

	Analysis by industry group							Analysis by type of asset		
	All Manufacturing industries	Food, drink and tobacco	Chemicals, coal and petroleum products	Metal manufacture	Engineering, shipbuilding, vehicles and metal goods	Textiles, leather and clothing	Other manufacturing industries	Materials and fuel	Work in progress	Finished goods
Level of stocks at end 1977	20 261	2 479	2 443	1 813	9 772	1 520	2 235	7 362	7 370	5 529
1973	1 336	152	251	60	595	75	203	829	544	−38
1974	1 288	261	403	7	459	19	138	658	53	577
1975	−1 221	−360	−285	21	−207	−96	−295	926	−272	−23
1976	316	16	97	236	−80	−3	51	−65	222	159
1977	442	160	−84	−37	275	30	98	−18	196	264
1973										
1st qtr	465	12	61	48	228	12	105	217	245	3
2nd	303	22	89	16	124	18	34	249	66	−11
3rd	307	64	97	5	81	21	40	188	150	−32
4th	261	54	5	−9	162	25	25	175	84	3
1974										
1st qtr	−173	95	274	−216	−132	−53	−141	293	−104	−363
2nd	566	130	36	64	141	58	137	80	130	356
3rd	782	91	155	119	264	25	128	290	109	383
4th	113	−55	−62	40	185	−10	15	−5	−83	201
1975										
1st qtr	−206	−96	−106	94	18	−31	−85	−289	−51	134
2nd	−255	−122	−48	21	7	−33	−80	−157	−63	−35
3rd	−498	−106	−89	−79	−101	−34	−88	−340	−94	−64
4th	−262	−35	−43	−16	−130	4	−42	−140	−64	−58
1976										
1st	23	−17	12	−5	13	21	−2	−88	62	49
2nd	−46	−13	27	51	−91	−17	−2	−48	21	−19
3rd	83	−20	19	90	−29	−5	28	47	36	—
4th	255	65	40	100	26	−3	27	24	103	128
1977										
1st qtr	267	14	9	38	137	12	58	90	141	35
2nd	79	41	−47	−1	12	31	41	−39	−84	201
3rd	−18	77	−56	−32	6	−6	−7	−23	−35	40
4th	115	29	11	−42	119	−8	6	−47	175	−13
1978										
1st qtr	71	52	37	−85	12	3	51	−28	37	62
2nd p	191							2	60	129

Table 3 Value of the physical increase of stocks held by wholesalers at 1975 prices seasonally adjusted

£ million

	Total wholesalers	General wholesale distributors	Dealers in coal, builders materials etc	Dealers in industrial materials and machinery
Level of stocks at end 1977	4 540	2 890	349	1 302
1967	31	17	1	14
1968	160	107	9	44
1969	131	81	3	47
1970	202	48	5	149
1971	218	181	−3	40
1972	173	147	29	−3
1973	432	433	4	−6
1974	361	213	15	133
1975	−249	−255	−26	32
1976	131	117	12	2
1977	266	158	−3	111
1973				
1st qtr	115	108	−16	23
2nd	74	80	15	−21
3rd	119	124	5	−9
4th	123	122	1	1
1974				
1st qtr	87	91	−6	3
2nd	156	101	13	43
3rd	62	9	—	53
4th	56	13	9	34
1975				
1st qtr	−84	−104	1	19
2nd	−107	−108	−12	13
3rd	−45	−24	−10	−11
4th	−13	−19	−5	11
1976				
1st qtr	43	43	19	−18
2nd	−10	45	−13	−41
3rd	81	26	9	47
4th	17	4	−3	15
1977				
1st qtr	82	55	8	20
2nd	179	45	14	121
3rd	−80	4	−44	−41
4th	85	54	20	11
1978				
1st qtr	81	63	−37	55
2nd p	−15	63	−37	55

Table 4 Increase in the book value of manufacturers' and distributors' stocks

£ million

	Total	Manufacturing	Wholesaling	Retailing
Level of stocks at end 1977	39 265	28 771	6 077	4 417
1967	280	180	47	51
1968	874	581	138	152
1969	985	766	134	113
1970	1 302	1 038	207	102
1971	764	471	264	133
1972	949	618	298	114
1973	3 699	2 425	793	481
1974	6 335	4 978	938	419
1975	3 054	2 259	348	447
1976	6 200	4 591	1 143	466
1977	5 094	3 578	898	618
1973				
1st qtr	681	459	121	101
2nd	749	515	138	96
3rd	1 031	627	289	115
4th	1 237	824	244	169
1974				
1st qtr	1 771	1 469	243	59
2nd	1 834	1 388	264	182
3rd	1 532	1 221	239	72
4th	1 197	899	192	106
1975				
1st qtr	973	894	18	61
2nd	612	559	15	38
3rd	530	218	158	154
4th	940	588	158	194
1976				
1st qtr	1 124	877	192	55
2nd	1 219	1 014	214	−9
3rd	1 666	1 091	407	168
4th	2 191	1 610	329	252
1977				
1st qtr	2 104	1 527	281	296
2nd	1 334	936	273	125
3rd	696	408	222	66
4th	959	707	121	131
1978				
1st qtr	683	487	91	105
2nd p	1 347	992	133	222

Inquiries: Manufacturers' industry 01-215 3176/5215, distributive and service industries 01-215 5998.

New companies in July

Details are given in the tables of new companies registered in Great Britain during July showing nominal capital. The figures exclude unlimited companies and companies limited by guarantee.

Nominal capital	Total	Public companies	Private companies
Not exceeding £100	3 318	—	3 318
Over £100 but under £1 000	41	—	41
£1 000 but under £10 000	1 193	—	1 193
£10 000 but under £50 000	483	—	483
£50 000 but under £100 000	81	—	81
£100 000 but under £1 000 000	137	—	137
£1 000 000 and over	11	—	11
Total number	5 264	—	5 264
	£ thous	£ thous	£ thous
Total amount of nominal capital	57 870	—	57 870

Companies registered in Great Britain in 1977 and 1978

	1977		1978	
	Number	Nominal capital £ thous	Number	Nominal capital £ thous
January	3 225	30 825	4 555	31 447
February	4 330	34 505	4 316	38 325
March	5 843	49 266	6 024	52 299
April	5 499	41 860	5 031	47 396
May	4 097	27 086	5 939	59 998
June	4 169	61 951	5 023	45 806
July	4 172	34 238	5 264	57 870
August	4 242	42 331		
September	4 527	51 261		
October	4 404	37 741		
November	5 007	33 987		
December	5 005	30 739		
Total	54 520	474 790		

Inquiries: Cardiff (2220) 388588 ext. 2226.

Registrations of British, community and foreign films

The following are details of films registered by the Department of Trade under the Films Acts 1960 to 1970, as amended by the European Communities Act 1972, during the week ended Friday, 25 August 1978.

BR/E indicates that the film is a British quota film, EC that the film is a quota film. The date which forms part of the registration number of each is the date on which quota life of the film expires.

Title of film	Registered no.	Playing time minutes	Date of registration	Registered in the name of	Maker's name
BRITISH					
The Italian Taste	BR/E 39712/27/8/83	21	21 August	Columbia-EMI-Warner Distributors Ltd	Global Films Ltd and Queensway Promotions Ltd
California Triple	BR/E 39713/27/8/83	23	21 August	Columbia-EMI-Wagner Distributors Ltd	Global Films Ltd and Queensway Promotions Ltd
Captain Scott Goes East	BR/E 39719/27/8/83	28	24 August	Twentieth Century- Fox Film Co Ltd	British Movietonews Ltd
Movietone News 2568	BR/E 39592/27/8/83	8	25 August	British Movietonews Ltd	British Movietonews Ltd
COMMUNITY					
The Inglorious Bastards	EC 39716/27/8/83	82	23 August	Entertainment Film Distributors Ltd	Film Concorde SRL, Rome
FOREIGN					
Thieves	F 39711	94	21 August	Scotia-Barber Distributors Ltd	Brut Productions Incorporated, New York
Damnation Alley	F 39714	91	22 August	Twentieth Century-Fox Film Co Ltd	Twentieth Century-Fox Film Corporation, California
Agent 69	F 39715	91	22 August	Supreme Film Distributors Ltd	Happy Films, Copenhagen
Barracuda	F 39717	96	23 August	Entertainment Film Distributors Ltd	Franklin Productions Incorporated, Massachusetts
Thunder and Lightning	F 39718	99	24 August	Twentieth Century-Fox Film Co Ltd	Twentieth Century-Fox Film Corporation, California
Heaven Can Wait	F 39720	101	24 August	Cinema International Corporation (UK)	Warren Beatty, California
Grease	F 39721	111	25 August	Cinema International Corporation (UK)	Robert Stigwood Organization Inc. New York

CORRECTION TO THE REGISTER

The registration number of the film 'The Last Wave' registered on 3 August 1978 has been corrected to BR/E 39696/6/8/83 and the maker to McElroy and McElroy Productions, New South Wales.

New companies registered in Northern Ireland

New companies registered in Northern Ireland during the month of July 1978

	July 1978	January to July 1978	1977
Public companies limited by shares	–	–	–
Private companies limited by shares	80	451	50
Private unlimited companies	–	1	–
Public companies limited by guarantee not having a share capital	–	3	–
Private companies limited by guarantee not having a share capital	–	7	–
Private companies limited by guarantee having a share capital	–	–	–
Total nominal capital of companies incorporated	£3,874,300	£20,779,726	£1,692,300

June figures should be amended as follows:
64 Private companies Limited by Shares Running total = 371
Total Nominal Capital of Companies incorporated = 3,127,100.
Running total £16,805,426.

Unemployment and vacancies

Unemployed persons in Great Britain on 10 August numbered 1 534 441 representing 6.6 per cent of total employees. The figure includes 210 882 school leavers under 18 not yet employed.

The seasonally adjusted series shows that the number of unemployed in Great Britain excluding the school leavers was 1 330 900 (5.7 per cent of all employees), an increase of 20 900 since 6 July. In the last three months there has been an increase on average of 8000 a month.

Of the total unemployed in Great Britain, 250 000 had been unemployed for four weeks or less. It is estimated that about 1 160 000 were unemployed for more than four weeks, and were aged under 60.

The average number joining the unemployment register in the three months ending July was 391 000 per month compared with 358 000 in the three months ending April and 358 000 in the three months ending January 1978. The average numbers leaving the register in these three periods were 394 000, 375 000 and 357 000 per month respectively.

The average inflow of vacancies in the three months ending July was 229 000 per month compared with 213 000 in the three months ending April and 195 000 in the three months ending January 1978. The average outflows in the three periods were 231 000, 203 000 and 185 000 per month respectively.

The unemployment figures exclude adult students aged 18 and over, who are registered for temporary employment during a vacation and who intend to return to full-time education when the new term begins. On 10 August these numbered 120 179 in Great Britain and 127 132 in the United Kingdom.

The unemployment figures do not include temporarily stopped workers – that is, those who had a job on the day of the count but were temporarily suspended from work on that day and were registered in order to claim benefits. These numbered 4177 in Great Britain and 4390 in the United Kingdom – representing a decrease on 6 July of 6743 in Great Britain and a decrease of 6927 in the United Kingdom.

In the week ending 10 June, 36 000 operatives in manufacturing industries in Great Britain were on short-time working. Of these 3000 were stood off for the whole week and 33 000 for part of the week. The figure compares with a total of 35 000 on short-time in the week ending 13 May. The short-time working figures include temporarily stopped workers.

Notified vacancies

The number of vacancies notified to employment offices in Great Britain remaining unfilled on 4 August was 212 259, a decrease of 4636 since 30 June. The number of vacancies notified to careers offices was 26 692, a decrease of 1078 since 30 June.

The seasonally adjusted series shows that the number of vacancies notified to employment offices in Great Britain was 207 700, a decrease of 1500 since 30 June.

The figures do not represent the total number of vacancies in the economy, but only those vacancies notified by employers to local offices of the Employment Service Division of the Manpower Services Commission and to careers offices.

Analyses of foreign enterprises in the UK: census of production 1973

Information about foreign enterprises in the United Kingdom for manufacturing industries (orders III-XIX of the standard industrial classification, 1968) is given in the tables. The analyses were derived from the results of the census of production 1973 and include estimates for non-respondents, unsatisfactory returns and establishments employing less than 20 persons who were not required to complete census returns.

The term enterprise is used in the censuses of production to describe either a single establishment, or two or more establishments under common ownership or control. Foreign ownership is considered to occur when a company registered abroad holds more than 50 per cent

Table 1 Output and costs of foreign enterprises: analysis by nationality of enterprise, 1973

United Kingdom private sector enterprises in manufacturing

			Employment			Wages and salaries			
						Operatives		Others	
	Enterprises	Establishments	Total	Operatives	Others	Total	per head	Total	per head
	no.	no.	'000	'000	'000	£m	£	£m	£
Total enterprises in UK	..	93 952	7 268.3	5 317.5	1 878.0	8 281.8	1 557	3 878.4	2 065
Total foreign enterprises	1 094	1 677	821.5	567.0	254.1	1 010.9	1 783	592.1	2 330
European Economic Communities	173	290	106.8	74.1	32.6	110.4	1 490	68.2	2 095
France	54	89	34.8	24.6	10.2	38.2	1 553	20.7	2 036
Federal Republic of Germany	47	62	9.6	6.4	3.1	9.3	1 457	6.6	2 102
Netherlands	41	98	55.7	38.1	17.7	55.8	1 467	37.7	2 135
Denmark	9	12	1.9	1.4	0.5	2.2	1 568	1.0	1 984
Irish Republic	14	19	3.3	2.6	0.7	3.4	1 315	1.3	1 883
Rest of EEC	8	10	1.5	1.1	0.4	1.6	1 402	0.9	2 273
Other foreign enterprises	921	1 387	714.8	492.9	221.6	900.5	1 827	523.8	2 364
Australia	14	25	3.2	1.8	1.4	2.6	1 446	3.0	2 128
Canada	38	66	39.4	29.0	10.3	56.7	1 957	23.8	2 297
South Africa	6	6	0.3	0.2	—	0.3	1 485	0.1	1 944
Sweden	24	29	11.9	8.3	3.6	14.6	1 764	7.3	2 022
Switzerland	54	92	32.9	22.1	10.8	36.0	1 630	24.2	2 242
United States	760	1 140	623.8	429.0	194.6	786.2	1 832	463.9	2 384
Rest of world	25	29	3.3	2.6	0.8	4.1	1 606	1.6	2 011

Table 2 Output and costs of foreign enterprises: analysis by order, 1973

United Kingdom private sector enterprises in manufacturing

Standard industrial classification orders			Employment			Wages and salaries			
						Operatives		Others	
		Establishments	Total	Operatives	Others	Total	Per head	Total	Per Head
		No.	'000	'000	'000	£m	£	£m	£
III-XIX	All manufacturing industries	1 677	821.5	567.0	254.1	1 010.9	1 783	592.1	2 330
III	Food, drink and tobacco	123	65.6	50.8	14.8	85.4	1 681	33.1	2 235
IV	Coal and petroleum products	24	5.2	3.5	1.7	8.8	2 481	4.9	2 921
V	Chemical and allied industries	247	87.5	49.0	38.4	83.6	1 705	87.7	2 283
VI	Metal manufacture	40	21.0	14.8	6.3	28.5	1 934	14.0	2 236
VII	Mechanical engineering	327	130.8	83.0	47.8	147.4	1 777	102.6	2 149
VIII	Instrument engineering	94	39.5	25.3	14.2	36.8	1 451	30.8	2 172
IX	Electrical engineering	195	145.7	96.7	48.9	136.6	1 412	105.4	2 153
X-XI	Shipbuilding and marine engineering, vehicles	66	175.3	134.6	40.7	303.6	2 256	127.4	3 127
XII	Metal goods not elsewhere specified	125	35.0	25.4	9.6	40.3	1 589	19.7	2 060
XIII	Textiles	62	18.3	14.4	4.0	22.7	1 579	8.3	2,088
XIV-XV	Leather, leather goods and fur, clothing and footwear	26	8.2	6.5	1.7	6.3	969	3.0	1 739
XVI	Bricks, pottery, glass, cement, etc	57	13.2	9.6	3.5	16.6	1 723	7.9	2 214
XVII	Timber, furniture, etc	22	2.5	1.9	0.5	3.4	1 777	1.1	2 012
XVIII	Paper, printing and publishing	135	19.6	12.9	6.6	22.5	1 740	13.0	1 967
XIX	Other manufacturing industries	134	54.0	38.6	15.4	68.4	1 771	33.2	2 159

of the share capital of the United Kingdom companies to which the establishments forming the enterprise belong.

Business Monitor PA 1002, the summary volume of the report on the census of production for 1973, also contains other enterprise-based analyses, including an analysis of public and private enterprises and analyses of the private sector's 100 largest enterprises identified by size of employment, net output and turnover. Analyses of private enterprises by size, industry concentration ratios and a number of establishment-based summary tables appear in the same publication. Business Monitor PA 1002 can be obtained from Her Majesty's Stationery Office, price £5.75.

Eplanatory notes and definitions of the main terms used in all census publications are given in Business Monitor PA 1001, Introductory Notes.

Inquiries about the PA series in Business Monitor and about the censuses of production generally can be obtained from the Business Statistics Office, Cardiff Road, Newport, Gwent, NPT 1XG, tel. 0633-56111 ext. 2455.

Gdp rises ½ per cent in second quarter

The preliminary estimate of gross domestic product, based on output data, for the second quarter is 112.5 (at constant prices, with 1970 = 100, and seasonally adjusted). This is around ½ per cent higher than in the first quarter of 1978, reflecting mainly increased industrial output and a higher level of activity in the distributive trades.

Table 1 continued

		Net output		Gross value added at factor cost		Capital expenditure			Total stocks and work in progress	
Total sales and work done	Gross output	Total	Per head	Total	Per head	Total net	Acquisitions	Disposals	Increase during year	Value at end of year
£m	£m	£m	£	£m	£	£m	£m	£m	£m	£m
59 171.8	60 398.8	25 377.0	3 492	22 645.1	3 116	2 082.2	2 381.8	299.7	2 422.6	12 699.9
9 500.0	9 688.8	3 884.1	4 728	3 476.7	4 232	359.5	386.7	27.2	371.0	2 074.6
927.6	944.6	423.2	3 964	371.7	3 482	48.8	52.1	3.2	41.4	181.4
277.1	285.7	131.8	3 785	112.0	3 217	14.4	16.4	2.0	15.5	58.8
83.8	85.0	37.6	3 936	29.3	3 065	4.0	4.4	0.4	3.4	17.1
491.0	497.3	228.1	4 092	208.5	3 741	21.2	21.9	0.7	20.3	95.6
35.8	36.0	8.9	4 698	7.4	3 952	8.1	8.1	—	0.8	2.5
28.0	28.6	11.1	3 421	9.8	3 019	1.2	1.2	—	1.0	4.5
11.9	12.1	5.8	3 795	4.7	3 063	0.1	0.1	—	0.4	2.8
8 572.5	8 744.2	3 461.1	4 842	3 105.0	4 344	310.6	334.6	24.0	329.6	1 893.2
35.5	35.8	17.8	5 576	14.7	4 592	1.8	2.1	0.3	0.6	2.9
663.0	679.9	225.6	5 732	210.9	5 359	22.4	22.8	0.4	20.8	184.4
2.1	2.2	0.9	3 634	0.8	3 222	—	—	—	0.1	0.4
106.7	110.1	51.9	4 359	46.4	3 899	4.0	4.7	0.7	4.9	32.7
367.8	379.0	126.8	3 856	114.2	3 474	15.5	17.0	1.4	18.4	98.8
7 366.7	7 506.3	3 028.3	4 854	2 709.8	4 344	265.2	286.3	21.1	284.3	1 569.7
30.7	30.9	9.6	2 860	8.1	2 432	1.7	1.8	—	0.5	4.3

Table 2 continued

		Net output		Gross value added at factor cost		Capital expenditure			Total stocks and work in progress	
Total sales and work done	Gross output	Total	Per head	Total	Per head	Total net	Acquisitions	Disposals	Increase during year	Value at end of year
£m	£m	£m	£	£m	£	£m	£m	£m	£m	£m
9 500.0	9 688.8	3 884.1	4 728	3 476.7	4 232	359.5	386.7	27.2	371.0	2 074.6
1 373.3	1 390.5	441.7	6 370	385.2	5 869	39.2	41.6	2.4	38.7	255.6
917.8	951.9	258.2	49 502	250.1	47 950	44.0	44.0	—	56.1	115.3
1 219.7	1 237.3	556.4	6 360	470.1	5 374	48.5	53.4	4.9	40.7	241.6
472.5	481.9	124.8	5 931	116.8	5 549	14.1	15.2	1.1	12.6	87.3
1 036.8	1 069.9	528.5	4 040	479.7	3 668	30.6	36.3	5.7	57.4	429.1
241.1	251.0	119.6	3 024	107.8	2 727	15.2	16.2	1.0	14.0	84.6
1 159.5	1 191.8	547.0	3 754	505.1	3 466	38.0	41.4	3.4	66.8	278.0
1 779.6	1 800.6	671.4	3 830	605.7	3 456	64.3	68.9	4.6	41.5	348.5
301.5	304.7	133.4	3 815	118.5	3 389	7.5	8.9	1.4	12.4	61.9
200.3	199.3	83.7	4 562	74.8	4 078	19.2	19.5	0.2	1.7	32.8
45.9	46.5	22.2	2 709	18.9	2 298	1.6	1.7	0.1	1.6	9.9
101.5	103.1	58.3	4 416	50.5	3 822	5.1	5.4	0.3	3.5	17.1
18.1	18.6	9.4	3 813	8.3	3 375	1.0	1.2	0.1	1.4	3.6
187.1	189.0	91.7	4 677	76.3	3 889	4.7	5.6	0.9	4.3	25.6
445.4	452.7	237.8	4 402	209.0	3 868	26.4	27.5	1.4	18.5	83.6

Table 3 Employment, net capital expenditure and net output of foreign enterprises analysis by region and assisted areas, 1973

United Kingdom private sector enterprises in manufacturing

Standard region or country	Type of area	Employment		Net capital expenditure		Net output and employment in the region of foreign enterprises whose establishments have more than 80 per cent of their employment in the region: Estimated net output	Employment as a percentage of total employment in the region	Net output as a percentage of UK total
		'000	% of UK	£ m	% of UK	£ m		
North	Total	30.2	3.7	19.9	5.5	109.2	62.3	2.8
	Special development	21.8	2.7	11.2	3.1	60.4		
	Development	8.4	1.0	8.7	2.4	48.8		
Yorkshire and Humberside	Total	32.2	3.9	12.9	3.6	111.5	82.5	2.9
	Intermediate	32.2	3.9	12.9	3.6	111.5		
East Midlands	Total	32.7	4.0	17.2	4.8	112.8	76.4	2.9
	Non-assisted	27.8	3.4	15.6	4.3	99.8		
	Intermediate	1.0	0.1	0.5	0.2	2.5		
	Derelict land clearance	3.9	0.5	1.0	0.3	10.5		
East Anglia	Total	35.8	4.4	13.5	3.8	118.4	89.5	3.1
	Non-assisted	35.8	4.4	13.5	3.8	118.4		
South East	Total	322.8	39.3	127.7	35.5	986.7	56.6	25.4
	Non-assisted	322.8	39.3	127.7	35.5	986.7		
South West	Total	26.8	3.3	11.7	3.3	63.1	60.0	1.6
	Non-assisted	19.6	2.4	9.6	2.7	42.0		
	Development	2.0	0.3	1.0	0.3	7.4		
	Intermediate	5.2	0.6	1.1	0.3	13.8		
West Midlands	Total	70.0	8.5	18.8	5.2	181.8	69.7	4.7
	Non-assisted	57.5	7.0	17.2	4.8	174.8		
	Derelict land clearance	12.5	1.5	1.6	0.4	7.0		
North West	Total	99.9	12.1	34.9	9.7	207.1	41.2	5.3
	Development	44.3	5.4	13.6	3.8	45.4		
	Intermediate	55.6	6.7	21.3	5.9	161.7		
England	Total	650.5	74.2	256.6	71.4	1 890.7	60.1	48.7
	Non-assisted	463.5	56.4	183.6	51.1	1 421.8		
	Special development	21.8	2.7	11.2	3.1	60.4		
	Development	54.7	6.6	23.4	6.5	101.6		
	Intermediate	94.1	11.5	35.8	10.0	289.4		
	Derelict land clearance	16.4	2.0	2.6	0.7	17.5		
Wales	Total	43.8	5.3	39.7	11.0	240.0	76.4	46.2
	Special development	15.0	1.8	3.2	0.9	42.9		
	Development	17.1	2.1	31.6	8.7	157.4		
	Intermediate	11.7	1.4	4.9	1.4	39.7		
Scotland	Total	97.6	11.9	39.2	10.9	352.9	81.3	9.1
	Special development	65.1	7.9	27.2	7.6	238.8		
	Development	30.4	3.7	11.4	3.2	110.1		
	Intermediate	2.0	0.3	0.5	0.1	4.0		
Great Britain		791.9	96.4	335.4	93.3	2 483.7	63.6	64.0
Northern Ireland		29.7	3.6	24.1	6.7	165.2	100.0	4.3
Unallocated		—	—	—	—	1 235.4	—	31.7
United Kingdom		821.6	100.0	359.5	100.0	3 884.3	64.9	100.0

Release dates of economic statistics to be published in September

Information in this table is issued by the Central Statistical Office on behalf of the Government Statistical Service and other organisations as a guide to the dates of publication of major economic series in September 1978. The dates are those which departments, or other organisations concerned, are aiming at, and would normally expect to meet. Exceptionally, there may be a delay resulting from unavoidable statistical problems of collection and compilation. Inquiries about individual series should be addressed to the source named.

Publication date and series	Method and time of release	Source
September		
1 Fri		
United Kingdom Balance of Payments 1967-77 (Pink Book)	Pink Book	CSO
4 Mon		
UK official reserves (August)	PN	HM Treasury
Capital issues and redemptions (during the month of August)	PN	Bank of England
Public sector borrowing requirement and details of local authority borrowing (2nd qtr)	PN	CSO
5 Tues		
Retail sales (July – final)	PN	Department of Trade
UK banks' elegible liabilities, reserve assets, reserve ratios and special deposits (mid-August)	PN	Bank of England
London clearing banks' monthly statement (mid-August)	PN	CLCB
Hire purchase and other instalment credit business (July)	PN	Department of Trade
6 Wed		
United Kingdom balance of payments (2nd qtr)	PN	CSO
Construction – output (2nd qtr)	PN	Department of the Environment
Housing starts and completions (July)	PN	Department of the Environment
7 Thurs		
Survey of short-term export prospects (12th Survey – July)	PN	Department of Trade
Provisional figures of vehicle production (Aug)	PN	Department of Industry
8 Fri		
National Income and Expenditure 1967-77 (Blue Book)	Blue Book	CSO
Company liquidity survey (2nd qtr)	*Trade and Industry*	Department of Industry
11 Mon		
Retail sales (August – prov)	PN	Department of Trade
Wholesale price index numbers	PN	Department of Industry
Central Government financial transactions (including borrowing requirement) (August)	PN	HM Treasury
12 Tues		
Building Societies' receipts and loans (Aug)	PN	BSA
13 Wed		
Index of industrial production (July – prov)	PN	CSO
14 Thurs		
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London dollar and sterling certificates of deposit (mid-Aug)	PN	Bank of England
Balance of payments current account and overseas trade figures (Aug)	PN	Department of Trade/ CSO
15 Fri		
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17 Sun		
Department for National Savings' monthly progress report (Aug)	PN	Department for National Savings
20 Wed		
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22 Fri		
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Man-made fibres: deliveries in second quarter, production in June and analysis of production in second quarter

Deliveries of staple fibre [1]

Thousand metric tonnes

	Total	Home					Exports [2]
		Total	Cotton spinning	Wool spinning	Flax spinning	Other systems and sundries	
1968	282.4	173.1	52.3	58.2	26.3	36.3	109.3
1969	299.3	169.2	51.1	51.5	28.0	38.6	130.1
1970	329.4	191.4	57.6	57.1	31.5	45.2	138.1
1971	338.7	185.9	59.6	50.1	29.3	46.9	152.9
	Total	Home					Exports [2]
		Total	Cotton spinning	Wool spinning	Other systems and sundries		
1972	363.9	186.4	49.5	33.4	103.5		177.5
1973	434.8	235.4	62.8	56.0	116.7		199.4
1974	346.1	190.4	51.4	51.1	87.9		155.7
1975	283.2	158.8	39.4	50.1	69.3		124.4
1976	351.3	184.6	47.0	53.0	84.6		166.7
1977	340.6	171.5	41.4	46.5	83.6		169.1
1976							
1st qtr	83.2	44.4	11.5	12.5	20.5		38.8
2nd	86.7	46.7	11.9	13.0	21.8		40.0
3rd	78.4	41.3	10.8	12.9	17.5		37.1
4th	103.1	52.2	12.8	14.7	24.7		50.9
1977							
1st qtr	105.0	48.7	12.5	13.1	23.1		56.3
2nd	84.1	43.4	11.1	12.6	19.7		40.7
3rd	78.2	37.2	7.6	10.5	19.1		41.0
4th	73.2	42.1	10.2	10.3	21.6		31.1
1978							
1st qtr	86.7	44.9	8.5	11.1	25.3		41.8
2nd	93.0	45.1	9.8	12.6	22.7		48.0

[1] The classification of end uses was revised in January 1972, and the figures for deliveries to individual industries from the first quarter 1972 are not comparable with those for earlier years. [2] The figures refer to deliveries from the industry direct for export and may differ from the totals recorded as exports in the monthly Overseas Trade Statistics.

Deliveries of continuous filament yarns [1]

Thousand metric tonnes

	Total	Home							Exports as yarn [2]
		Total	Broad weaving	Carpets and rugs	Weft knitting	Warp knitting	Industrial purposes (tyres, etc)	Other purposes	
1968	238.4	188.9	35.3	4.7	54.9	32.0	52.2	9.8	49.4
1969	242.7	193.6	33.7	5.5	51.9	35.3	58.8	8.4	49.1
1970	254.8	198.1	28.2	7.1	63.7	38.0	53.3	7.8	56.7
1971	261.4	198.7	25.3	8.7	69.9	41.4	43.5	9.9	62.7
	Total	Home						Textured or texturing for all purposes other than carpets or industrial	Exports as yarn [2]
		Total	Broad weaving	Carpets and rugs	Warp knitting	Industrial purposes (tyres, etc)	Other purposes		
1972	270.1	198.7	25.1	13.4	40.4	40.8	10.0	69.0	71.4
1973	313.6	227.5	25.8	19.4	46.6	45.4	13.0	77.4	86.1
1974	259.4	188.6	22.3	14.1	35.8	35.1	11.9	69.3	70.8
1975	246.9	185.8	21.7	17.3	33.1	35.4	10.5	67.8	61.1
1976	271.2	192.4	19.5	22.2	31.1	38.3	14.8	66.6	78.8
1977	239.8	167.9	18.9	16.9	26.0	35.5	10.8	59.7	72.0
1976									
1st qtr	71.4	50.7	5.0	5.9	9.1	10.5	3.7	16.6	20.6
2nd	66.6	46.7	4.9	4.8	7.5	9.3	3.4	16.7	19.9
3rd	62.5	43.5	4.4	5.2	6.7	8.5	3.3	15.5	19.0
4th	70.7	51.4	5.2	6.3	7.8	10.0	4.4	17.8	19.3
1977									
1st qtr	64.9	45.9	5.2	5.2	7.5	9.4	3.1	15.5	19.1
2nd	60.3	41.7	4.8	3.7	6.6	9.2	2.7	14.7	18.6
3rd	54.7	37.9	4.3	3.3	5.5	8.4	2.2	14.2	16.8
4th	59.9	42.4	4.6	4.8	6.3	8.5	2.9	15.3	17.6
1978									
1st qtr	63.4	41.2	4.9	4.2	6.1	8.0	2.2	15.9	22.2
2nd qtr	61.7	41.9	4.7	3.9	6.0	8.0	2.4	16.8	19.8

[1] The classification of end uses was revised in January 1968 and the figures for deliveries to individual industries 1968 to 1971 might not be fully comparable with those for earlier years. From January 1972 a further reclassification was introduced: deliveries of textured yarns and yarns for texturing, which were previously included in the figures for individual industries, are shown separately from the first quarter 1972. [2] The figures refer to deliveries from the industry direct for export and may differ from the totals recorded as exports in the monthly Overseas Trade Statistics.
Source: Man-made Fibres Producers Committee.

Inquiries: 01-212 0017/6474.

Deliveries of man-made fibres in the second quarter

Total deliveries of man-made fibres in the second quarter of 1978 were 7 per cent more than in the second quarter of 1977. Deliveries of continuous filament yarns to the home trade were 1 per cent more than in the first quarter of 1977, while deliveries of staple fibre were 4 per cent more.

Inquiries: 01-212 0017/6474.

Production of man-made fibres in June

In the three months ended May 1978 the volume of production of man-made fibres, seasonally adjusted was estimated to have been 19 per cent higher than in the three months ended February 1978. Total production by weight of man-made fibres in January-June 1978 was

Man-made fibre production

Thousand metric tonnes

	Total	Continuous filament (singles)	Staple fibre
1968	539.1	241.8	297.4
1969	553.9	252.5	301.5
1970	599.4	257.6	341.9
1971	613.1	276.4	336.7
1972	626.5	264.0	362.5
1973	730.8	305.6	425.3
1974	627.6	271.0	356.6
1975	562.5	246.5	316.0
1976	618.4	270.7	347.7
1977	551.8	239.3	312.5
1976			
1st qtr	159.8	70.0	89.8
2nd	157.5	69.7	87.7
3rd	140.4	62.4	78.0
4th	160.7	68.6	92.1
1977			
1st qtr	154.9	67.2	87.7
2nd	150.8	63.9	86.8
3rd	131.0	55.2	75.8
4th	115.1	53.0	62.1
1978			
1st qtr	150.1	60.6	89.5
2nd	156.2	62.2	94.0
1977			
January	49.1	20.9	28.2
February	50.3	21.8	28.5
March	55.5	24.5	31.0
April	52.3	20.8	31.5
May	47.7	21.5	26.2
June	50.8	21.7	29.2
July	49.5	20.8	28.7
August	37.6	16.0	21.6
September	43.9	18.4	25.5
October	43.5	18.2	25.4
November	36.8	17.9	18.9
December	34.8	17.0	17.8
1978			
January	44.2	19.1	25.1
February	47.6	19.0	28.7
March	58.2	22.5	35.7
April	48.3	19.1	29.2
May	58.5	22.7	35.8
June	49.3	20.3	29.0

Source: Production stats: Man-made Fibres Producers Committee. Index of production: Department of Industry.

Index of the volume of production 1970 = 100

1968	87
1969	92
1970	100
1971	106
1972	107
1973	127
1974	111
1975	101
1976	112
1977	100

	Actual	Seasonally adjusted
1976		
1st qtr	116	115
2nd	115	112
3rd	104	110
4th	115	113
1977		
1st qtr	114	113
2nd	108	106
3rd	92	97
4th	84	83
1977		
January	106	111
February	118	113
March	118	114
April	111	107
May	103	103
June	112	106
July	100	105
August	80	91
September	94	94
October	90	87
November	86	82
December	78	81
1978		
January	94	99
February	111	105
March	119	115
April	105	102
May	123	123

the same as in January-June 1977, output of continuous filament decreased by 6 per cent and staple fibre increased by 5 per cent.
Inquiries: 01-212 0017 or 01-212 6474.

Analysis of production of man-made fibres in the second quarter

Production by weight of synthetic fibres in the second quarter of 1978 was 10 per cent higher than in the corresponding period of 1977 while production of viscose and acetate fibres was 8 per cent lower. Within the total for synthetic fibres, production of continuous filament yarns was 2 per cent less and staple fibre 20 per cent more. Under the heading 'viscose and acetate' production of continuous filament yarns decreased by 4 per cent and staple fibre decreased by 9 per cent compared with the second quarter 1977.

Inquiries: 01-212 0017/6474.

Analysis of man-made fibre production Thousand metric tons

	Total		Continuous filament		Staple fibre	
	Synthetic	Viscose + acetate	Synthetic	Viscose + acetate	Synthetic	Viscose + acetate
1968	268.4	270.8	144.3	97.5	124.1	173.3
1969	291.4	262.5	155.9	96.6	135.5	166.0
1970	336.9	262.5	166.6	90.9	170.3	161.6
1971	357.3	255.7	191.2	85.2	166.1	170.6
1972	373.9	252.6	196.4	67.6	177.5	185.0
1973	453.9	277.0	233.0	72.6	220.9	204.4
1974	396.1	231.5	200.3	70.7	195.8	160.8
1975	361.1	201.4	184.0	62.5	177.1	138.9
1976	414.2	204.2	200.1	70.6	214.1	133.6
1977	358.8	193.0	170.7	62.6	182.1	130.4
1976						
1st qtr	104.2	55.6	52.0	18.0	52.2	37.6
2nd	105.1	52.4	52.0	17.7	53.1	34.7
3rd	97.8	42.6	46.2	16.2	51.6	26.4
4th	107.2	53.5	49.9	18.6	57.3	34.8
1977						
1st qtr	102.7	52.2	49.3	17.9	53.4	34.3
2nd	98.9	51.9	47.8	16.1	51.1	35.8
3rd	82.7	48.3	40.9	14.3	41.8	34.0
4th	74.5	40.6	38.7	14.3	35.8	26.3
1978						
1st	99.6	50.4	45.0	15.5	54.6	34.9
2nd	108.3	47.8	46.8	15.4	61.5	32.4

The heading 'Viscose + acetate' includes triacetate.

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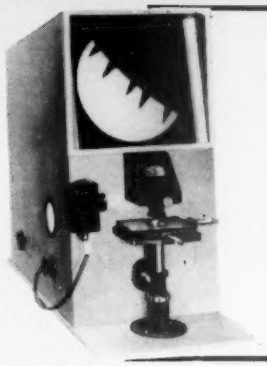

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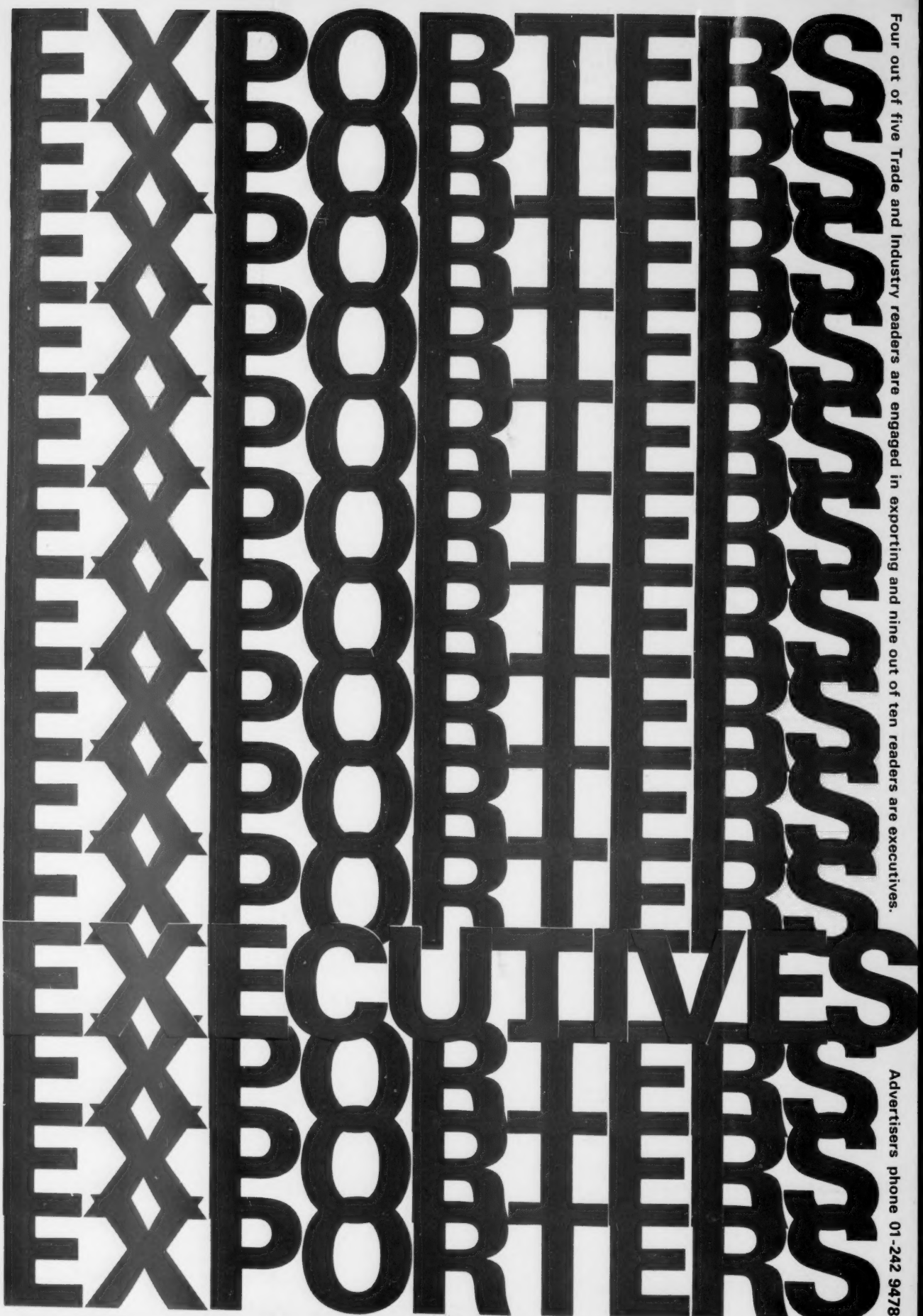

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